

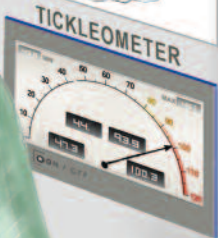
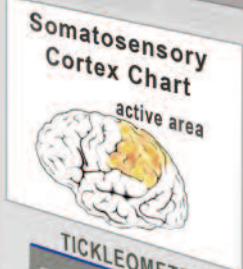
**BRAINTREE
SCIENTIFIC, INC.**
2018

Tickle Room 2

TICKLING FACILITY
Certified Staff
Memberships
Available

RECEPTION
Mon-Fri- 9am-6pm
No cellphones
No photos
No video

Exit Survey



**BRAINTREE
SCIENTIFIC, INC.**
The Anatomy of the Rat
Cunice Chase Greene
Published by
BRAINTREE SCIENTIFIC, INC.



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Ordering Information:

Order online or by phone, fax, email or mail your orders to us any time of day. Orders will be processed and in-stock items shipped within 24 hours after receipt of order. Please specify any special shipping instructions when placing your order.

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Methods of Payment:

Purchase orders on pre-approved accounts, or prepayment by Visa, MasterCard, American Express, bank check, money order or wire transfer. Wire transfers must be drawn on a US Bank and are subject to a bank processing fee - please call for quote. All monies quoted in US dollars. When placing your order, be sure to include your tax exempt number where applicable.

Shipping Charges:

Shipping and Handling Charges are prepaid and added to invoice. Freight is FOB Braintree, MA. For orders shipping out of the country freight charges are to be paid in advance prior to release.

Satisfaction Guaranteed:

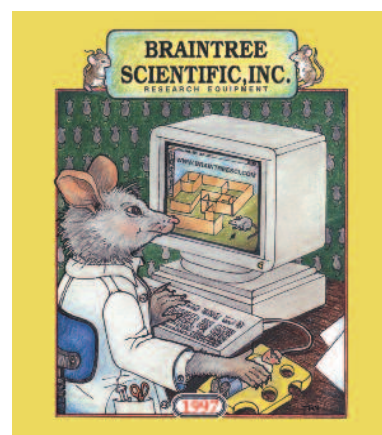
If for any reason you are not fully satisfied, call for a Return Material Authorization number and shipping instructions. All returns must be received within 35 days of shipping. A 20% restocking fee may apply depending on circumstances of return. Please inspect all shipments upon receipt. If any visible damage - sign for as damaged and contact carrier to place a claim.

Please Note: All prices are subject to change without notice.

Online ordering now available!

Please visit our website at www.BraintreeSci.com.

New and current product listings, pricing, detailed product information, as well as frequently asked questions, are available at your fingertips.



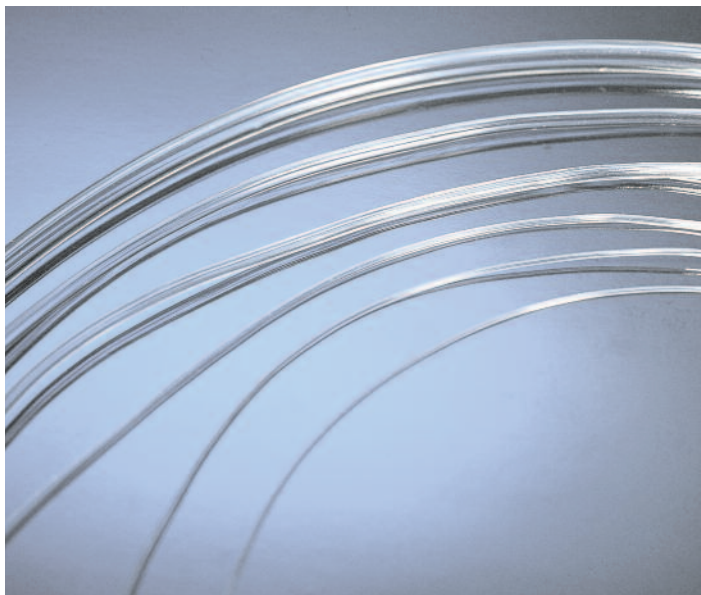
About the cover

A study published in Science showed that rats respond to playful touching, e.g. tickling in much the same way as humans. The pleasurable aspects of being tickled are linked through brain dopaminergic mechanisms. We envision a recreational spa facility at which mice continue to investigate and enjoy the benefits of therapeutic tickling.

Science 11 Nov 2016:
Vol. 354, Issue 6313, pp. 757-760
DOI: 10.1126/science.aah5114

Micro-Renathane® Implantation Tubing

Reduces the probability of intravascular thrombosis



Polyurethane Catheter Tubing

Braintree Scientific is proud to present a major advance in chronic catheter material. In our opinion, Micro-Renathane® is the most blood-compatible tubing ever made. For implantation studies in experimental animals this new tubing offers extended catheter life and reduces the probability of intravascular thrombosis.

The scanning electron micrographs (approx. 10,000X) illustrate the dramatic difference between Renathane tubing and conventional vinyl tubing. After use in hemodialysis, Renathane showed significantly fewer surface deposits of platelets, proteins, trapped red cells and other blood elements than other tubings.

“Medical Grade” Plastics

It is appropriate to clarify the definition of the phrases “medical grade” plastic and “FDA approved” plastic. There is no approved “medical grade” plastic or resin. Each individual supplier has his own criteria for what polymer and additive combinations constitute suitability for medical use. Similarly, there is no “FDA approved” plastic or resin in the Code of Federal Regulations. Food and Drugs, Title 21, Part 121, the FDA has listed the additives allowable in plastics intended for food contact use. In formulating a PVC compound for medical use the manufacturer generally chooses plasticizers, stabilizers, antioxidants, colorants, etc., which are acceptable for food use.

Micro-Renathane® does not contain any plasticizers.

Medical Uses of Polyurethane

Polyurethane based polymers were introduced into the United States from Germany. Early biomedical applications of polyurethanes were described by Boretos and Pierce. They reported excellent vascular acceptability in experimental heart-assist pump chambers and arterial cannulae. In subsequent work Boretos reported the absence of acute toxicity for segmented polyurethanes. He also reported that polyurethane rings did not deteriorate or cause tissue reaction after implantation for 18 months.

Lyman and coworkers have also investigated polyurethanes for the fabrication of heart-assist devices. Artificial heart devices were constructed of this material and implanted in calves. Other uses of polyurethanes as biomaterials have been described by Bruck. Polyurethane based polymers are currently commercially employed in hollow fiber kidneys, vascular catheters and intra-aortic balloons. Due to the slightly higher cost of polyurethanes, they have only been used where exceptional biologic and blood compatibility is required.

Micro-Renathane® is sold only for experimental use in laboratory animals.

A brief report, with references, is included with each shipment of Micro-Renathane®. We will be pleased to send a copy upon request.

Same price as 1989!

Supplied non-sterile. +/- .002

MODEL	OD/ID WALL
MRE-010	0.010" OD x 0.005" ID (0.25 OD x 0.12 ID mm)
MRE-025	0.025" OD x 0.012" ID (0.64 OD x 0.30 ID mm)
MRE-033	0.033" OD x 0.014" ID (0.84 OD x 0.36 ID mm)
MRE-037	0.037" OD x 0.023" ID (0.94 OD x 0.58 ID mm)
MRE-040	0.040" OD x 0.025" ID (1.02 OD x 0.64 ID mm)
MRE-040-S-20	0.040" OD x 0.020" ID (1.02 OD x 0.50 ID mm)
MRE-050	0.050" OD x 0.040" ID (1.27 OD x 1.02 ID mm)
MRE-065	0.065" OD x 0.030" ID (1.65 OD x 0.76 ID mm)
MRE-080	0.080" OD x 0.040" ID (2.03 OD x 1.02 ID mm)
MRE-080-S-38	0.080" OD x 0.038" ID (2.03 x 0.96 ID mm)
MRE-095	0.095" OD x 0.066" ID (2.41 OD x 1.68 ID mm)
MRE-160	0.160" OD x 0.091" ID (4.06 OD x 2.31 ID mm)
MRE-COMBO	Combination of 36 feet in your choice of sizes

*Kit includes 12 individually packaged 3ft lengths (excludes MRE-010).

†Minimum 36' when ordering continuous lengths.

More length options available online at BraintreeSci.com

Teflon Coated Guide Wire

MODEL	DESCRIPTION
ST003-14	0.003" Teflon Coated Guide Wire 14"L (non-sterile)
ST003-7	0.003" Teflon Coated Guide Wire 7"L (non-sterile)

A Guide to Manufacture, Surgical Implantation, Maintenance and Use of Micro-Renathane® Vascular Catheters in Laboratory Animals

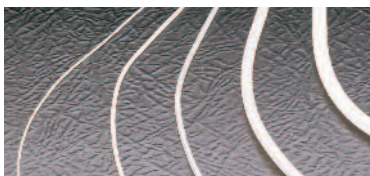
by Alfred Sherer, D.V.M. and Lewis Kinter, Ph.D.

This comprehensive manual includes how to manufacture catheters from Micro-Renathane® tubing, different implantation techniques, catheter use, and maintenance.

MODEL
MRE-MANUAL

RenaSil™ Silicone Rubber Tubing

RenaSil™ is a Platinum cured silicone tubing that is inert and contains no harmful leachable plasticizers. It is essentially non-reactive. The tubing will maintain its flexibility through a temperature range of -100°F to 500°F. Storage temperature and humidity have virtually no effect on silicone tubing, therefore shelf life is unusually long. This tubing may be autoclaved and re-sterilized without altering physical characteristics. RenaSil™ meets the standards of the US Pharmacopeia, Class IV and CRF 21 Part 177.2600 for food additives. All sizes are packaged clean, without talc and sealed in polyethylene bags.



Supplied non-sterile.

MODEL	OD/ID WALL
SIL025	0.025" OD x 0.012" ID (0.64 OD x 0.30 ID mm)
SIL037	0.037" OD x 0.025" ID (0.94 OD x 0.64 ID mm)
SIL047	0.047" OD x 0.025" ID (1.19 OD x 0.64 ID mm)
SIL065	0.065" OD x 0.030" ID (1.65 OD x 0.76 ID mm)
SIL080	0.080" OD x 0.040" ID (2.03 OD x 1.02 ID mm)

Polyethylene Tubing

Polyethylene is a relatively rigid polymer suitable for short-term catheterizations and for ex vivo applications. Polyethylene 'sleeves' can be slipped over less rigid catheter materials (Micro-Renathane™, Renasil™) at suture points to protect the latter from inadvertent constriction.

Supplied non-sterile. Minimum order 36 feet.

MODEL	OD/ID WALL
PE10	0.024" OD x 0.011" ID (0.60 x 0.28mm)
PE20	0.043" OD x 0.015" ID (1.09 x 0.38mm)
PE30	0.030" OD x 0.017" ID (0.76 x 0.43mm)
PE50	0.038" OD x 0.023" ID (0.965 x 0.58mm)
PE60	0.048" OD x 0.030" ID (1.22 x 0.76mm)
PE100	0.060" OD x 0.034" ID (1.52 x 0.86mm)

Tygon® Catheter Tubing

Flexible and clear; this tubing is ideal for cannulations. Easily fabricated to various catheter styles and virtually "kink free" when securing in a vessel and exiting the animal model. Material is less permeable than silicon rubber tubing and has a very smooth surface which inhibits thrombic events.

MODEL	OD/ID WALL	LENGTH
TYG-030	0.03" OD x 0.01" ID (0.8mm x 0.3mm)	50 ft. coil
TYG-060	0.06" OD x 0.02" ID (1.5mm x 0.5mm)	50 ft. coil
TYG-070	0.07" OD x 0.04" ID (1.8mm x 1.0mm)	50 ft. coil

PTFE Heat Shrink Tubing

(USP Class VI Approved)

Medical grade polytetrafluoroethylene tubing has high tensile strength and preserves high fidelity pressure waveforms with very small internal diameter tubing. PTFE heat shrink tubing can be shrink-fitted to make secure connections with other devices. 2-1 heat-shrink ratio.

Supplied non-sterile.

MODEL	EXP ID	REC ID	REC WALL	TOL
PTFE-015	0.034" ID (0.86mm)	0.015" ID (0.38mm)	0.006"	±0.002"
PTFE-018	0.038" ID (0.97mm)	0.018" ID (0.46mm)	0.009"	±0.002"
PTFE-032	0.055" ID (1.4mm)	0.032" ID (0.81mm)	0.012"	±0.003"
PTFE-039	0.060" ID (1.5mm)	0.039" ID (0.99mm)	0.012"	±0.003"

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PTFE Sub-Lite Wall® Tubing

A major breakthrough in micro-miniature tubing

(USP Class VI Approved)



Medical grade polytetrafluoroethylene tubing has superior lubricity and slides easily into tiny convoluted passages. No residue build-up inside tubing, non-toxic, non-contaminating, and easily sterilized (excluding Gamma). Compatible with tissues and fluids, yet withstands moisture, it is chemically inert and stable. Continuous service temperature (up to 500°F).

Supplied non-sterile.

MODEL	OD/ID WALL	THICKNESS	LENGTH
SUBL-060	0.006" x 0.002" (0.15 x 0.05mm)	0.002"	25 ft coil
SUBL-080	0.008" x 0.004" (0.20 x 0.10mm)	0.002"	25 ft coil
SUBL-120	0.012" x 0.006" (0.30 x 0.15mm)	0.003"	25 ft coil
SUBL-140	0.014" x 0.008" (0.36 x 0.20mm)	0.003"	25 ft coil
SUBL-160	0.016" x 0.010" (0.41 x 0.25mm)	0.003"	25 ft coil
SUBL-190	0.019" x 0.013" (0.48 x 0.33mm)	0.003"	25 ft coil
SUBL-220	0.022" x 0.016" (0.56 x 0.41mm)	0.003"	25 ft coil

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RenaPulse™ High Fidelity Pressure Tubing

Measure blood pressure and waveforms more accurately, while keeping superb biocompatibility

RenaPulse™ tubing, exclusively from Braintree Scientific, is made from a new material which transmits pulse waveforms with high fidelity. During pressure pulses, fluid flows into the catheter and depresses the diaphragm of a pressure transducer. However, the same pressure wave that reaches the transducer also causes the pressure catheter to bulge slightly. This bulging may allow a significant volume of fluid to flow in and out of the catheter with each pulse. Given the resistance of the catheter, this small flow can lead to pressure drop along the catheter and inaccurate pressure readings from the transducer. RenaPulse™ is a stiffer tubing which allows high fidelity measurement of systolic and diastolic pressures. Because air bubbles in pressure catheters are very 'soft,' they can completely distort the pulse wave. We make RenaPulse™ tubing transparent to help user locate and remove such bubbles. Small clots can block pressure catheters, and prevent pulse waves from reaching the transducer. Since RenaPulse™ has the superb blood compatibility of Micro-Renathane®, the chance of clot formation is greatly reduced.

These features make RenaPulse™ the tubing of choice for high fidelity pressure measurements in small animals. RenaPulse™ is flexible enough for direct vessel insertion. It can be bonded to luer lock terminations and stopcocks. RenaPulse™ can also be used with standard compression adapters or needle stubs.

Supplied non-sterile.

MODEL	OD/ID WALL
RPT-015	0.017" OD x 0.012" ID (0.43 OD x 0.3 ID mm)
RPT-033	0.033" OD x 0.014" ID (0.84 OD x 0.36 ID mm)
RPT-037	0.037" OD x 0.023" ID (0.94 OD x 0.58 ID mm)
RPT-040	0.040" OD x 0.025" ID (1.02 OD x 0.64 ID mm)
RPT-080	0.080" OD x 0.040" ID (2.03 OD x 1.02 ID mm)

*Kit includes 12 individually packaged 3 ft lengths

†Minimum 36 feet when ordering continuous lengths.

More length options available online at BraintreeSci.com



Vascular Catheters for Rats and Mice

Vascular catheters have stood the test of time because they are affordable and they work! These catheters, modified from the original design of Tinsley (1983), are fabricated with Braintree Scientific's medical grade polyethylene (PE) tubing and silicone rubber tubing (RenaSil™). Sealed with a stainless steel plug, when filled with a viscous catheter lock solution they maintain a very high rate of patency* for several weeks.

Both thoracic and femoral models feature:

- ▶ Externalized polyethylene (PE) tubing catheter port
- ▶ Flared for easy access with a blunted 23 ga. hypodermic needle for sampling or infusion
- ▶ Port is sealed with 0.025" diameter stainless steel plug when not in use
- ▶ Catheter port is designed to exit between the scapulae and to be secured with a single Autoclip® 9mm stainless steel wound clip.

Polyethylene (PE) tubing catheter body: The rigidity of PE tubing minimizes the incidence of catheter lumen constriction and relaxation, an "eye dropper" effect, which allows blood to enter the intravascular tip. All catheter anchor points allow for suturing around the PE tubing minimizing the likelihood of suture induced catheter lumen constriction.

RenaSil™ intravascular tip: RenaSil™ as the intravascular tip for reducing intravascular thrombus formation.

Reduced diameter intravascular tip: Reducing the inner diameter of the intravascular tip relative to the inner diameter of the port allows for efficient expulsion of blood from the intravascular tip. The last step following catheter implantation or use should be to advance the stainless steel plug into the port for a few millimeters. This is sufficient to expel trace amounts of blood from the intravascular tip with a minimum amount of catheter lock solution entering the bloodstream.

*Patency, especially for blood sampling, is highly dependent on the location of the intravascular tip.

Thoracic Catheter



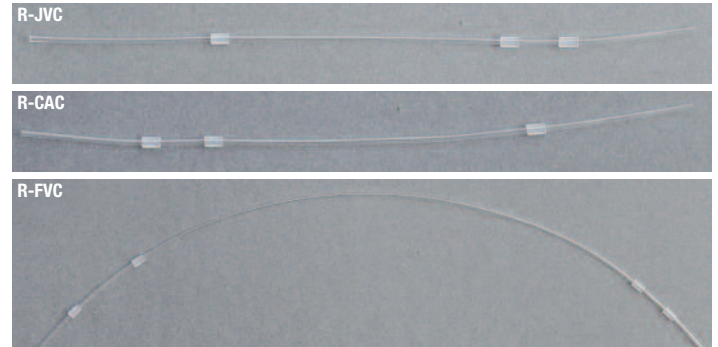
Suitable for blood sampling and/or drug infusion in either the jugular vein or carotid artery of the rat or mouse.

Shown with disk

A subcutaneous retaining disk, consisting of 0.5" diameter surgical mesh attached at the base of the catheter port, can be added to the R-JVC, R-CAC, and the R-FAC/FVC at an additional cost. This disk serves to anchor the catheter if the wound clip is dislodged or removed. If ordering please add a "D" to the end of the model number.

MODEL	DESCRIPTION	CATHETER TIP LENGTH	TOTAL LENGTH
R-JVC	Rat Thoracic Jugular Vein	32mm	115-120mm
R-CAC	Rat Thoracic Carotid Artery	26mm	110-115mm
M-JVC	Mouse Thoracic Jugular Vein	13mm	58-60mm
M-CAC	Mouse Thoracic Carotid Artery	11mm	56-58mm
PP-23	Stainless Steel, 0.025" - dia. port plug dozen		

Polyurethane Rat Vascular Catheters (Micro-Renathane® and RenaPulse™)



- ▶ Catheters consist of a continuous length of MRE037 or RPT037 with RenaSil, suture anchors
- ▶ Catheters are accessed with Cat. #N-23 catheter needle
- ▶ Sealed with Cat. #23-PP catheter plug
- ▶ No adhesives; suture anchors grip the catheter tubing without constricting the catheter lumen and are movable
- ▶ Catheter tip rounding available for MRE037 catheter fabrications

Rat Thoracic Catheters

Rat jugular vein catheter specifications:

Total catheter length: 120mm

Port length: 25mm

Intravascular length: 32mm

Number of retention beads: 3

MODEL	DESCRIPTION
R-JVC-M37 (MRE-037)	Rat Jugular Vein Catheter
R-JVC-R37 (RPT-037)	Rat Jugular Vein Catheter
R-JVC-M37-R (MRE-037)	Tip rounding for Rat Jugular Vein Catheter

Rat thoracic carotid artery specifications:

Total catheter length: 120mm

Port length: 25mm

Intravascular length: 26mm

Number of retention beads: 3

MODEL	DESCRIPTION
R-CAC-M37 (MRE-037)	Rat Carotid Artery Catheter
R-CAC-R37 (RPT-037)	Rat Carotid Artery Catheter
R-CAC-M37-R (MRE-037)	Tip rounding for Rat Carotid Artery Catheter

Rat femoral artery catheter specifications:

Total catheter length: 230mm (l), 210mm (m), or 190mm (s)

Intravascular length: 40mm

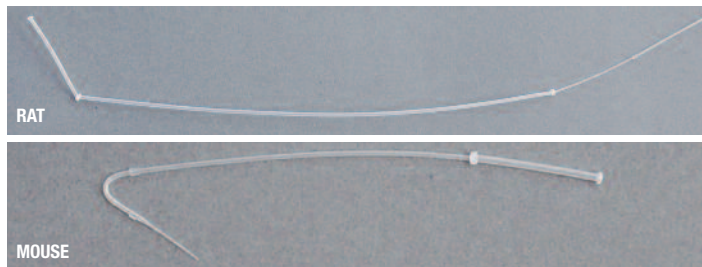
Port length: 25mm

Number of retention beads: 4

MODEL	DESCRIPTION
R-FC-M37 (MRE-037)	Rat Femoral Artery Catheter
R-FC-R37 (RPT-037)	Rat Femoral Artery Catheter
R-FC-M37-R	Tip rounding for Rat Femoral Artery Catheter



Femoral Catheter



MODEL	DESCRIPTION
R-FC	Rat Femoral Vein/Artery Catheter*
M-FC	Mouse Femoral Vein/Artery Catheter - catheter body length 45mm
PP-23	Stainless Steel, 0.025" dia. - port plug dozen

*Suitable for blood sampling and/or drug infusion in either the femoral artery or femoral vein. The rat femoral catheter is available in three different sizes of catheter body length; **large (160-170mm), medium (140-150mm), and small (120-130mm).** Please specify when ordering.

BTing™ Catheters

For rodent vascular applications

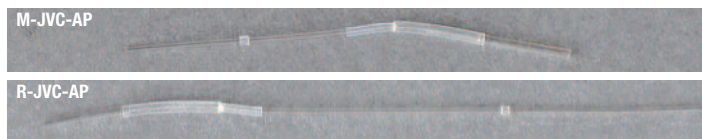


What is Bump-tubing (BTing™)?

Bump-tubing is a continuous length of Tecoflex® polyurethane tubing with a tapered transitional section resulting in catheter tubing with the intravascular tubing section having an ID/OD of 0.012"/0.025" and an extravascular tubing section having an ID/OD of 0.023"/0.037".

MODEL	DESCRIPTION
BTing-M	Mouse Jugular Vein Catheter Total catheter length: 65mm Intravascular tippet length: 13mm External catheter length: 10-15mm
BTing-R	Rat Jugular Vein Catheter Total catheter length: 115mm Intravascular tippet length: 32mm External catheter length: 25-30mm

Intravenous Osmotic Pump Catheter



Braintree Scientific's Micro-Renathane® based catheter for continuous, intravenous (via the jugular vein) administration of drug solutions delivered with the ALZET® Osmotic Pump. Catheter can be modified for infusion via other blood vessels (please inquire).

Supplied non-sterile

MODEL	DESCRIPTION
R-JVC-AP	Rat Intravenous Osmotic Pump Catheter
M-JVC-AP	Mouse Intravenous Osmotic Pump Catheter

Restrained Tail Vein Infusion Model



Most researchers use butterfly needles to administer fluids via the tail vein. Allows access for both timed injections and repeated bolus administration. The MTV-1 system incorporates a small catheter that is easily inserted into the tail vein and will remain insitu in a restrained mouse for as long as restraint is feasible. Due to the flexibility and size of the catheter, trauma to the tail vein is minimized, allowing for long term

and repeated bolus dosing. By avoiding the damage associated with indwelling needles there is an increased chance that the tail vein will remain viable for the duration of the study.

MTV-2, MTV-2S, MTV-3 catheters are used for researchers that use small bore MRI machines or that need extra length for long bore magnets.

MTV-9 includes stylet, splittable needle and injection cap.

- ▶ Eliminates the need for an assistant
- ▶ Reduces setup and procedure time
- ▶ Provides superior control
- ▶ Improves visualization

MODEL	DESCRIPTION
MTV-1	Restrained Tail Vein Infusion Catheter 10cm of 28ga (0.014" x 0.007") connected to 7" of (0.033" x 0.014") with stylette and 23ga thin wall needle
MTV-2	10cm of 28ga (0.014" x 0.007") connected to 20" of (0.033" x 0.014") and 23ga thin wall needle, no stylette
MTV-2S	10cm of 28ga (0.014" x 0.007") connected to 20" of (0.033" x 0.014") with stylette and 23ga thin wall needle
MTV-3	10cm of 28ga (0.014" x 0.007") connected to 31.5" of (0.033" x 0.014") and 23G thin wall needle, no stylette

More options available online at BraintreeSci.com

Micro Cannula System



The Micro Cannula System provides quick and convenient access to an artery or vein in small animals such as mice and rats. The tapered design of the PFA tubing provides strength while maintaining a very small distal tip of 0.016" OD x 0.008" ID. The sharpened stylette and beveled tip provides easy insertion into any vessel. Total length is approximately 10cm not including the stylette.

MODEL	DESCRIPTION
MC-28	Micro Cannula System

Molecular Imaging Catheters



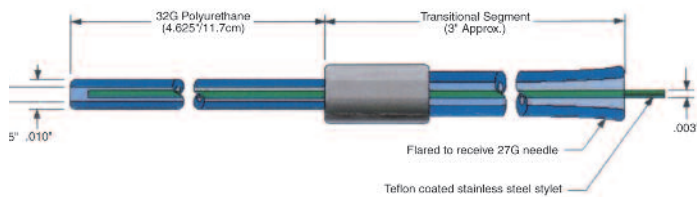
Catheter consists of medical grade PTFE tubing (SUBL-160, 0.016" OD x 0.010" ID), 40cm long with an attached 27ga blunted luer hub.

MODEL	DESCRIPTION
MIC	Molecular Imaging Catheter



32ga Mouse Catheter System

This catheter system offers the smallest diameter catheter/stylet product available for murine procedures



Ultra-thin diameter catheters for applications in mice:

This 32ga murine catheter is a key component of a withdrawal/delivery system specifically developed for use in mice and other small research animals. A significant achievement over standard polyethylene-based products, its material and small size combine to produce a minimally reactive catheter, thereby reducing catheter-induced artifacts that could obscure experimental observations. Suitable for cardiovascular, intracranial, and other applications.

Includes:

- ▶ 11.7cm 32ga (0.010" OD/0.005" ID) polyurethane catheter
- ▶ Bonded connection assembly flared to accept a 27ga needle
- ▶ 0.003" diameter Teflon®-coated stainless steel stylet to facilitate placement
- ▶ Individually packaged

MODEL	DESCRIPTION
CS-32	32ga Intracranial Catheter System

Intrathecal Catheter



Braintree Scientific's rat intrathecal catheter offers a means for the administration of microliter amounts of drug solution to the lumbar (or higher) region of the rat spinal cord. This catheter system is ideal for use in antinociceptive studies involving rats.

MODEL	DESCRIPTION
R-ITC	Intrathecal Catheter

Mouse Intravascular Catheter



Designed for quick and easy insertion into arteries and veins of mice and rats (primarily mice).

Supplied sterile.

MODEL	DESCRIPTION	SIZE	TIP OD	TIP ID	MATERIAL
MC-0189EO	Mouse Catheter	28G, 60mm	.014"	.007"	PU

Double Lumen Catheters

DL-AS-040: This double lumen catheter has an outer diameter of only 0.040" and consists of an inner SUBL-160 (PTFE) catheter and an outer MRE040 (polyurethane) catheter. The standard length of this double lumen catheter is 6" with both lumens opening at the proximal tip. The distal ends are equipped with luer hubs. *Supplied non-sterile.*



CR-DL28: Double lumen intracranial catheter system contains an 11.7cm 28g (0.025" OD distal portion/0.007" ID each lumen) polyurethane catheter, a bonded connection assembly flared to accept a 27ga needle, a 0.003" diameter Teflon®-coated stainless steel stylet to facilitate placement. Individually packaged. *Supplied non-sterile.*

CR-DL32: Double lumen intracranial catheter system contains an 11.7cm 32ga (0.018" OD distal portion/0.005" ID each lumen) polyurethane catheter, a bonded connection assembly flared to accept a 32ga needle, a 0.003" diameter Teflon®-coated stainless steel stylet to facilitate placement. Individually packaged. *Supplied non-sterile.*

MODEL	DESCRIPTION
DL-AS-040	MRE-040 OD/SUBL-160
CR-DL28	11.7cm 28ga/0.007" ID
CR-DL32	11.7cm 32ga/0.005" ID

Stereotaxic Brain Lesioning Cannula

These stainless steel cannulae are designed to fit in slotted acrylic stereotaxic clamping devices and are ideal for administering chemical solutions to discrete areas of the rat and mouse brain.



- ▶ Cannula consists of a 60mm length of 30ga stainless steel hypodermic tubing with a 45mm overlapping sleeve of 23ga stainless steel tubing to facilitate secure placement by the stereotaxic clamping device
- ▶ Tip of the cannula consists of exposed 30-gauge stainless steel hypodermic tubing, 10mm long
- ▶ Cannula comes with an 18" length of Tygon tubing with an end designed to fit over a micro syringe needle tip

MODEL	DESCRIPTION
RM-SBL	Stereotaxic brain lesioning cannula

Bile Duct Catheter

For bile duct collection in rats, with a fine diameter tip (MRE-025).

MODEL	DESCRIPTION
BDC-R	Rat Bile Duct Catheter
BDC-M	Mouse Bile Duct Catheter

Duodenal Rat Catheter

Can be used as a return catheter; to shunt the bile into the duodenum; its tip is larger in diameter (MRE040).

MODEL	DESCRIPTION
R-DUOD	Duodenal Catheter



Blunt Tip Catheter Needles

Stainless steel, blunt tip, hypodermic needle with standard luer hub. For use as an interface to connect a hypodermic syringe directly to catheter port for intravascular substance administration, blood sampling and catheter flushing.

MODEL	DESCRIPTION	UNITS
NB-30	30 gauge - 0.5"	1 dz
NB-27	27 gauge - 1"	1 dz
NB-26	26 gauge - 0.5"	1 dz
NB-25	25 gauge - 1"	1 dz
NB-23	23 gauge - 1"	1 dz
NB-22	22 gauge - 1"	1 dz
NB-21	21 gauge - 1"	1 dz
NB-20	20 gauge - 1"	1 dz

Sharp Tip Catheter Needles

Ultra-sharp, tri-beveled, anti-coring, stainless steel needle. Translucent, color-coded luer lock hub.

Supplied sterile.

MODEL	DESCRIPTION	UNITS/PK
NS-30	30 gauge - 0.5"	100
NS-27	27 gauge - 0.5"	100
NS-25	25 gauge - 1"	100
NS-23	23 gauge - 1"	100
NS-22	22 gauge - 1"	100
NS-21	21 gauge - 1"	100
NS-20	20 gauge - 1"	100
NS-18	18 gauge - 1"	100

Stainless Steel Port Plugs

Stainless steel port plug, 0.5" length.

MODEL	DESCRIPTION	UNITS
PP-30	0.012" plug	1 dz
PP-28	0.014" plug	1 dz
PP-27	0.016" plug	1 dz
PP-23	0.025" plug	1 dz
PP-22	0.028" plug	1 dz
PP-21	0.032" plug	1 dz
PP-20	0.036" plug	1 dz
PP-19	0.042" plug	1 dz

Stainless Steel Connectors

Stainless steel tubing connectors, 0.5".

MODEL	DESCRIPTION	UNITS
C-30	30 gauge	1 dz
C-28	28 gauge	1 dz
C-27	27 gauge	1 dz
C-23	23 gauge	1 dz
C-22	22 gauge	1 dz
C-21	21 gauge	1 dz
C-20	20 gauge	1 dz
C-19	19 gauge	1 dz

Straight Non-Coring Huber Needles



Great for dosing or sampling. Use with an access port or injection cap. Special point allows for greater septum life.

MODEL	DESCRIPTION	UNITS/PK
H22-75	22 gauge 0.75"	25

GentleSharp

A More Humane Blood Sampling System

GentleSharp uses micro-vibrations to help sharps puncture and glide through tissue more smoothly, minimizing subject discomfort and stress during small volume blood sampling.



The research behind Gentle Sharp scientific studies showed reduced stress in rats and mice as well as improved success for novice users

Research not only outlines the major findings, but also summarizes results and experimental design for each:

- ▶ Reduced plasma corticosterone for serial blood
- ▶ Reduced animal movement and vocalization for serial blood collection
- ▶ Reduced peak insertion force during rat tail penetration
- ▶ Decreased needle insertions for serial blood collection
- ▶ Increased collection success for serial blood collection
- ▶ Decreased needle insertions for serial blood collection - repeated sampling on same day
- ▶ Increased collection success for novice collectors
- ▶ Increased blood mass for serial blood collection
- ▶ No significant change in mice handling time for serial blood collection

MODEL	DESCRIPTION
GS-101-2	GentleSharp System – 2' cord
GS-101-4	GentleSharp System – 4' cord
GS-201	Hard Carrying Case with custom foam insert

Trocars

Skin tunneling needles (trocars) offer a quick and easy method for routing catheters and electrodes subcutaneously. Trocars are manufactured from thick walled medical grade stainless steel and have a semi-blunt 45 degree beveled tip or a stylet. The 7g trocar is perfect for most large animal catheters while 10g is suited for smaller animals and catheters. Call for custom lengths.



MODEL	DESCRIPTION
TRO-7-6	Semi-blunt tip, 7 gauge x 6"/15cm
TRO-7-12	Semi-blunt tip, 7 gauge x 12"/30cm
TRO-10-8	Semi-blunt tip, 10 gauge x 8"/20cm

Trocars with Stylet

TRO-14MS	Mouse Trocar with Stylet
TRO-7B-12	Semi-Blunt Tip, 7 gauge x 12" with Stylet
TRO-7B-6	Semi-Blunt Tip, 7 gauge x 6" with Stylet

Vein Pick

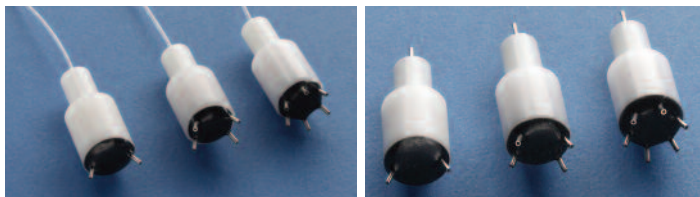
Holds vessel open during cut-down catheter insertion procedure. Tapered tip of vein pick is inserted into incision of vessel. Catheter slides under groove on underside of vein pick into vessel.



MODEL	DIMENSIONS	UNITS/PK
V-PIC	Tapered tip Vein Pick	10



Miniature Manifolds



Perfusion manifolds can be used in any application where from 2 to 8 perfusion lines are required to be connected to a chamber or other device. Manifold input(s) converge to the common output with minimum dead space. Designed for use with polyethylene (PE) tubing, manifolds can be used with any other tubing of similar dimensions. When connected to a chamber via a short length of tubing, very rapid solution changes are possible.

Miniature manifolds are useful for applications involving small volumes or slow flow rates. Small diameter tubing is used with these models; PE-50 tubing for the input ports, and PE-10 or PE-50 tubing for the MM or ML series output ports, respectively.

Specifications:

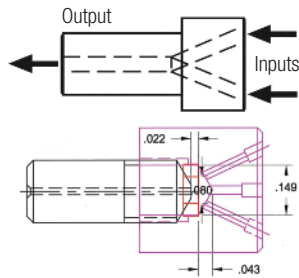
Material: Delrin™

Large Diameter: 8.0mm

Small Diameter: 4.7mm

Body Length: 18mm

Input Tubing: PE-50



MODEL	DESCRIPTION
ML-2	Miniature Manifold, 2 ports
ML-4	Miniature Manifold, 4 ports
ML-6	Miniature Manifold, 6 ports
ML-8	Miniature Manifold, 8 ports
MM-2	Miniature Manifold, 2 ports
MM-4	Miniature Manifold, 4 ports
MM-6	Miniature Manifold, 6 ports

The single port is available in either PE10 (MM Series) or PE50 (ML Series) and the manifold is PE50.

Y Connector Catheter



Y Connector Catheter is designed to be used with a syringe pump for infusion and withdrawal of fluids. Primarily used to adapt two osmotic pumps to one catheter line.

Supplied sterile.

MODEL	DESCRIPTION	SIZE	TUBE OD	TUBE ID	MATERIAL
Y-0225EO	Rat Y Connector Catheter	4.5F, 40mm	.039"	.023"	PE
	Double outlets		.052"	.034"	PE

Skin Button



Rodent Skin Buttons are used for externalizing a catheter or for an attachment of a spring tether to the animal as an alternative to the harness or jacket. The advantage of a skin button is lower chance of infection, secure catheter anchoring and the ability to keep the catheter away from the animal. The silicone sleeve is the perfect size for most standard rodent tethers and the 1" Dacron Mesh allows for suture attachment and tissue ingrowth.

MODEL	DESCRIPTION
SBD-01	Skin Button with Dacron Mesh
SBD-02	Skin Button with Dacron Mesh and Silicone Sleeve
SBD-M2	Skin Button with Dacron Mesh for Mice

Cath-Loc HGS: Heparin/Glycerol Catheter Lock Solution



The antithrombotic characteristics of heparin plus the viscous nature of glycerol is combined in a solution to promote and extend the patency of vascular catheters. Proven as the solution of choice in studies in catheterized animals*, Cath-Loc HGS solution acts as a non-toxic anticoagulant lock solution for indwelling catheters. This formulation is the most widely used as a pre-clinical catheter lock.

**Y.S. Luo, et. al. AALAS 2000 Comparison of Catheter Lock Solutions in Rats. Not for human use – animal research use only*

MODEL	DESCRIPTION	UNITS
HGS	Cath-Loc HGS, 10ml vial	5

Cath-Loc HD: Heparin/Dextrose Catheter Lock Solution



Cath Loc HDS acts as a non-toxic anticoagulant lock solution for indwelling catheters for pre-clinical research. This is one of the most common formulations used as a reliable pre-clinical lock solution to maintain catheter patency in vascular catheters. This solution, used in both large and small animals, combines the high viscosity of 50% dextrose with the anticoagulant activity of heparin to promote and extended implanted catheter patency. The high osmolality of dextrose prevents bacterial colonization and multiplication and the high

viscosity of dextrose reduces washout from the catheter tip. The heparin in the solution also aids in prevention of clot formation. Since both dextrose and heparin are physiological constituents which occur naturally in the blood, any excess Cath-Lock HDS injected is quickly metabolized, when used properly. Available in 10ml sterile vials.

MODEL	DESCRIPTION	UNITS
HDS	Cath-Loc HD, 10ml vial	5

TCS Anti-Microbial Lock Solution

Providing patency and infection control



TCS, a catheter lock solution, combines two active ingredients vital to the effective management of vascular access catheters; Taurolidine and Citrate. When TCS is instilled in device lumens, their internal flow passages are resistant to clot formation and hostile to bacterial and fungal growth. TCS is non-toxic and there are no known systemic effects. Taurolidine, an anti-microbial agent, promotes catheter patency by preventing Biofilm formation while Citrate, acts as the anticoagulant.

Taurolidine component offers broad spectrum antimicrobial activity against aerobic and anaerobic gram-positive and gram-negative bacteria, yeast and fungi. Prevents biofilm development and consequently bacterial and fungal colonization, decreasing the risk of infection does not induce the development of resistant microbes.

Citrate component forms a complex with calcium, disrupting the normal coagulation cascade, precipitating it into an unusable form inhibiting blood coagulation with no systemic effect.

MODEL	DESCRIPTION	UNITS
TCS-CS	Taurolidine-Citrate Solution, 7 ml vial used for catheter lock solution (1 box/10 vials)	10
TCS-EA	Taurolidine-Citrate Solution, 7 ml vial used for catheter lock solution	1



Prefilled Syringes

Prefilled syringes for flushing, locking or sampling through any catheter or port system. Order what you need when you need it, in convenient, ready to use packaging. Syringe sizes range from 1cc-60cc with volumes from 0.2ml-60ml.

- ▶ Forget ordering and storing saline and other physiologic solutions in large, inconvenient containers
- ▶ Forget wasting time unwrapping countless individually wrapped syringes for your daily procedures
- ▶ Forget mixing sterile solutions and filling them in a less than sterile environment
- ▶ Catheter patency issues that arise two weeks after surgery or longer are most likely caused by poor maintenance procedures and not related to surgery



Prefilled syringes can be filled with most any solution including saline, heparin/saline, dextrose, heparin/dextrose, and many others.

MODEL	SYRINGE SIZE	FILL VOL	HEPARIN	UNITS/CS
Saline (0.9%) Filled Syringe				
SYS-1-0.5	1cc	0.5cc	—	300
SYS-1-1.0	1cc	1cc	—	300
SYS-3-2.0	3cc	2cc	—	300
SYS-3-3.0	3cc	3cc	—	300
SYS-5-3.0	5cc	3cc	—	300
SYS-5-5.0	5cc	5cc	—	150
SYS-10-10.0	10cc	10cc	—	90
SYS-60-60.0	60cc	60cc	—	15
Heparin & Saline Filled Syringes				
SYH-50-0.5	1cc	0.5cc	50u/ml	300
SYH-50-1.0	1cc	1cc	50u/ml	300
SYH-50-2.0	3cc	2cc	50u/ml	300
SYH-50-3.0	3cc	3cc	50u/ml	300
SYH-100-0.5	1cc	0.5cc	100u/ml	300
SYH-100-1.0	1cc	1cc	100u/ml	300
SYH-100-2.0	3cc	2cc	100u/ml	300
SYH-100-3.0	3cc	3cc	100u/ml	300
SYH-300-0.5	1cc	0.5cc	300u/ml	300
SYH-300-1.0	1cc	1cc	300u/ml	300
SYH-300-2.0	3cc	2cc	300u/ml	300
SYH-300-3.0	3cc	3cc	300u/ml	300
SYH-500-0.5	1cc	0.5cc	500u/ml	300
SYH-500-1.0	1cc	1cc	500u/ml	300
SYH-500-2.0	3cc	2cc	500u/ml	300
SYH-500-3.0	3cc	3cc	500u/ml	300

Blunt Needles with Syringe



Attached blunt needles on 1cc syringes not only save tremendous amounts of time but will also help lower costs.

Additional size syringes are available and can be supplied with any size blunt needle. All syringes are capped and ETO exposed. Call for additional sizes.

MODEL	SIZE	GAUGE	LENGTH	QTY/PK
B20-50-1	1cc	20	0.5"	25
B20-100-1	1cc	20	1"	25
B22-50-1	1cc	22	0.5"	25
B22-100-1	1cc	22	1"	25
B23-50-1	1cc	23	0.5"	25
B23-100-1	1cc	23	1"	25
B25-50-1	1cc	25	0.5"	25
B25-100-1	1cc	25	1"	25

Zero and Minimal Dead Volume Syringes



Z1-22 Zero Dead Volume



Z1-MDV-CC Minimal Dead Volume

Zero dead volume sterile syringes offer researchers the ability to completely remove all fluid from the syringe for zero test article or blood loss.

MODEL	DESCRIPTION	UNITS/PK
Z1-22-PK	1cc Zero Dead Volume Syringe with 22G connector . . .	25
Z1-22-CS	1cc Zero Dead Volume Syringe with 22G connector . . .	100
Z1-CC	1cc Zero Dead Volume Syringe without connector . . .	10
SY1-10S	1cc Minimal Dead Volume Syringe without connector . .	10

**For a larger selection of syringes
visit www.BraintreeSci.com**





Rodent Ports

Small, light-weight access ports designed specifically for rodent studies.

Penny MousePort for intravascular and peritoneal access



Penny MousePort incorporates two major design breakthroughs; a unique septum design and an all silicone port body. MousePort is provided with preattached silicone catheters, in sizes 1-4 French.

- ▶ Low profile
- ▶ Small size and weight
- ▶ Biocompatible oval shape
- ▶ Easy port entry into the smallest mouse
- ▶ Small dead volume
- ▶ Reduces infusate volume
- ▶ Unique septum offering 180° access
- ▶ Stainless steel needle guard protection
- ▶ Ideal for both intravascular and peritoneal access
- ▶ Avoids repeated tail vein catheterization

Specifications:

Material: all silicone with a stainless steel needle guard

Weight: 1g

Volume: 100ul

Height: 0.28"/0.7cm

Septum Opening: 180° access (1.2cm x 0.4cm)

Footprint: 2cm x 1.1cm

Catheter Material: Preattached silicone catheter

Catheter Configuration: 1-4 French

MODEL	DESCRIPTION
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Silicone V-A-P MMP Model Mouseport preattached models

MMP-1S	1F Silicone Catheter x 6"/15cm
MMP-2S	2F Silicone Catheter x 6"/15cm
MMP-3S	3F Silicone Catheter x 6"/15cm
MMP-4S	4F Silicone Catheter x 6"/15cm

Rat-O-Port for intravascular and peritoneal access

Rat-O-Port's rounded port chamber has been shown to prolong patency by preventing sludge formation. The Rat-O-Port can be provided with preattached or attachable polyurethane or silicone catheters, rounded or blunt tip, in sizes 1-5 French.



- ▶ Low profile and light weight
- ▶ Reduces incidence of skin necrosis
- ▶ Rounded port reservoir and tangential catheter outlet
- ▶ More complete flushing reduces complications
- ▶ Ringed septum easy to palpate
- ▶ Provides easy access during needle insertion
- ▶ Ideal for long-term access procedures
- ▶ Tested to 350 punctures with a 24 gauge huber needle
- ▶ Avoids repeated venipuncture
- ▶ Promotes animal welfare
- ▶ Ideal for both intravascular and peritoneal access
- ▶ Avoids repeated tail vein catheterization

Specifications:

Material: Plastic with stainless steel catheter pin

Weight: 1.5g

Volume: 0.11cc

Height: 0.35"/0.9cm

Septum Opening: 0.3"/0.8cm

Footprint: 0.7"/1.7cm

Catheter configuration: Rat-O-Port models can be ordered with catheters that are preattached during manufacture or attachable/Ac - to be attached during surgery

Catheter material: Rat-O-Port models can be ordered with silicone, polyurethane, or hydromer coated in sizes 1-7 French

Catheter tip configuration: Blunt or rounded tip

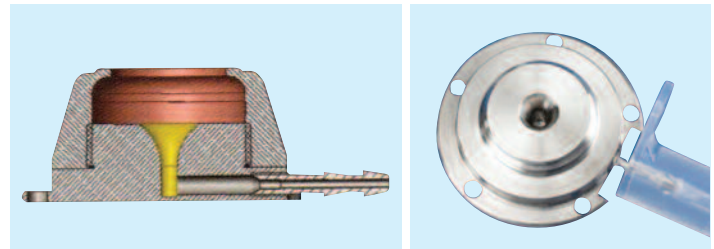
MODEL	DESCRIPTION
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Plastic V-A-P ROP Model Rat-O-Port preattached and attachable models

ROP-1S	1F Silicone Catheter x 6"/15cm
ROP-1P	1F PolyUrethane Catheter x 6"/15cm
ROP-2S	2F Silicone Catheter x 6"/15cm
ROP-2P	2F PolyUrethane Catheter x 6"/15cm
ROP-3S	3F Silicone Catheter x 6"/15cm
ROP-3P	3F PolyUrethane Catheter x 6"/15cm
ROP-3.5P	3.5F PolyUrethane Catheter x 6"/15cm
ROP-4S	4F Silicone Catheter x 6"/15cm
ROP-2H	2F Hydrocoat PolyUrethane Catheter x 6"/15cm
ROP-3H	3F Hydrocoat PolyUrethane Catheter x 6"/15cm
ROP-3.5H	3.5F Hydrocoat PolyUrethane Catheter x 6"/15cm
ROP-2IS	2F Silicone Radiused Tip Catheter x 6"/15cm
ROP-3IS	3F Silicone Radiused Tip Catheter x 6"/15cm
ROP-4IS	4F Silicone Radiused Tip Catheter x 6"/15cm

LoVol™ Port

Ultra-low dead volume port for CSF infusion and withdrawal



Ultra-low dead volume of Lovol Port is the port of choice for any application requiring minimal dead volume, i.e. an unusually expensive test article of CSF collection. Available in 2 sizes, MIN-LoVol and MID-LoVol, with reservoir volume only 10% of the Solomon MIN and MID standard SoloPorts. LoVol ports can be accessed with standard 22ga and 24ga huber needles and infusion sets.

MODEL	DESCRIPTION
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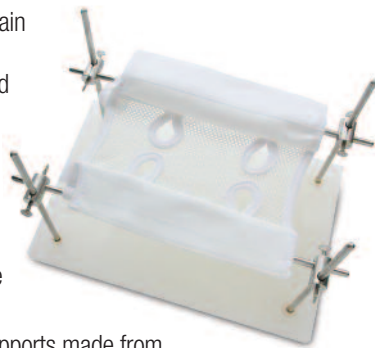
MINLOA-C30	Mini Port only- attaches to a 3F catheter
MINLOA-C35	Mini Port Only- attaches to a 3.5F catheter
MINLOA-PU-C30	Mini Port with a 3F round tip 60cm polyurethane catheter with moveable bead
MINLOA-PU-C35	Mini Port with a 3.5F round tip 60cm polyurethane catheter with moveable beads



Rodent Sling and Restraint Cover

Slings can be used to securely restrain rodents during many procedures. Choice of restraint in many sizes and range of adjustment make rodent sling a valuable asset to any laboratory setting.

Other small animal species may also be restrained using same frame with suits and slings available for mice and guinea pigs.



Frame: Polypropylene base with supports made from stainless steel, one inch thick base material provides a robust support that does not move. Stainless supports and connectors held with convenient thumbs screws allow for height adjustments. Frame is easily cleaned and dismantles when not in use.

Restraints: Full body restraint is provided with choice of either sling suit or sling cover. Both restrainers allow for access to all limbs, head and tail. Velcro fasteners allow for quick and secure restraint and adjustable fit for individual animals. Sling suits are sold in five sizes according to weight range of animals. Rodent Sling Cover is available in single size for rats up to 500g. Custom sizes available on request.

MODEL	DESCRIPTION
RSL-FS1	Rodent Sling - frame and cover
RSL-FC01	Rodent Sling Cover only
RSL-FC1	Rat Sling Suit Small, 150-200g
RSL-FC2	Rat Sling Suit Medium, 250-350g
RSL-FC3	Rat Sling Suit Large, 350-500g
RSL-FC4	Rat Sling Suit X-Large, 500g+
RSL-C00	Mouse Sling Suit
RSL-C03	Mouse Sling Suit Large, 30g+

Rodent Jackets

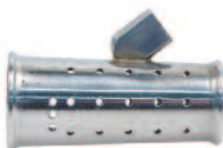


Manufactured from breathable, latex-free power net mesh in a saddle-style format. Designed for use with rodent tethers and available in a range of sizes to ensure a secure yet comfortable fit.

MODEL	DESCRIPTION
RJ-M01	Mouse up to 25g
RJ-M02	Mouse 25-30g
RJ-M03	Mouse 30+g
RJ-S	Rat 150-250g
RJ-M	Rat 250-350g
RJ-L	Rat 350-500g
RJ-XL	Rat 500+g
RJ-RDI	Rat Dermal Insert
RJ-MDI	Mouse Dermal Insert

Rodent Tail Cuffs

Constructed of stainless steel with self-threading tether attachment point. Used as an alternative to the rodent jacket.



MODEL	DESCRIPTION
TC-RT-T1	Rat Tail Cuff
TC-MT-T1	Mouse Tail Cuff
TC-RTC-1	Light Weight Rodent Tail Cuff, anodized aluminum
TC-RTC-2	Tapered Stainless Steel Rodent Tail Cuff, 16mm OD – 14mm ID

Elizabethan Collars

Designed to prevent animals from grooming and to protect surgical or treatment sites. All collars are manufactured from a low-density polyethylene, for smaller animals a lightweight material is used. Collars close with Velcro fasteners providing adjustable and secure fit for individual animals. Neck openings are bound with cotton jersey for comfort and light padding.



MODEL	DESCRIPTION
EC-M1	Elizabethan Collar for Mice 2.75"
EC-R1	Elizabethan Collar for Rats up to 450g - 4.625"
EC-R2	Elizabethan Collar for Rats 450g+ - 5.125"

Swivel

Rodent swivels are made from durable plastic and are fitted with a 20g or 22g needle. Designed for long-life and repeated usage. Sterile packaged.

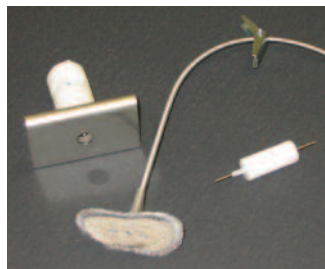
MODEL	DESCRIPTION
RS-20G	Gas Sterilized 20g
RS-22G	Gas Sterilized 22g

Swivel Mount

Rodent swivel mount secures to the outside of the cage. Comprised of a retainer made of durable plastic with a stainless steel clip.

MODEL	DESCRIPTION
RSM	Rodent Swivel Mount

Tethers



Constructed from lightweight stainless steel spring-coil, rodent tethers come complete with a crimped end for direct attachment to the rodent swivel (removing the need for potentially troublesome connection hardware). Jacket anchors comes ready sewn with silver woven fabric for added comfort and resistance to

opportunistic infection. Rodent tethers are designed to protect the exteriorized catheter and can be used with rodent jackets.

MODEL	DESCRIPTION
RT-12	Tether 12" sewn
RT-18	Tether 18" sewn

LOMIR Butterfly Harness

A versatile product; created from One Strap™ Velcro for making a simple to use mouse harness suitable for the majority of mice commonly used in research. Butterfly harnesses' versatility extends to a wide range of applications; originally designed to protect excisions during healing. The harness is compatible with infusion systems and those for dermal applications.

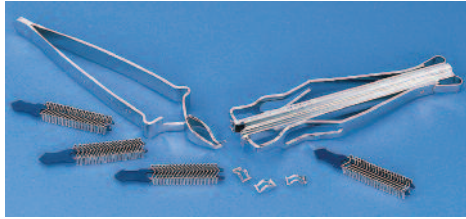


MODEL	DESCRIPTION
MHBF00	Mouse Butterfly Harness (single piece back to back Velcro™) - one size



EZ Clip™

Ideal for use with lab animals or in veterinary surgery



Autoclip® and EZ Clip™

Racks of 9mm clips are individually packaged in heat sealed, peel-away sleeves for cleanliness, ease of handling and storage. EZ Clips™ are packaged 20 clips on



a rack, with 5 racks per strip (100 clips total). They can be purchased by the strip, 2 strips (200 clips) or by the case (1000 clips). Clips are

pyrogen free and non-sterile. However, the autoclavable plastic packaging allows for sterilization of the clips without removing them from the packaging. The Clip Applier is a stainless steel applying forcep that holds one rack of 20 clips. Works like a staple gun to apply clips to wound. The clips are fed by rustless beryllium-copper springs. The Clip Remover is also stainless steel and can be used to remove all sizes of wound clips.

MODEL	DESCRIPTION
EZC-KIT	EZ Clip Kit
ACS-APL	Clip Applier
ACS-RMV	Clip Remover
EZC-2PK	EZ Clips, Non-Sterile, (200 clips)
EZC-CS	EZ Clips, Non-Sterile, Case (1,000 clips)

Reflex 7mm Wound Closure System

For those who prefer the smaller clip; the Reflex 7mm Skin Closure System is the right choice.

MODEL	DESCRIPTION
RF7-APL	Applier
RF7-CS	Case of 100/box
RF7-RMV	Remover
RF7-KIT	Includes applier, remover and 100 clips



Autoclip® Wound Closing System



The Autoclip® Applier works like a staple gun to rapidly apply Autoclip closures. The applier will hold 20 Autoclips, which are held firm and ready for use by rustless beryllium-copper springs. Autoclips provide maximum holding force with minimal trauma. There is no need for assistance to operate the applier or remover. When the wound is healed, clips are easily removed with the Autoclip Remover. Stainless steel Autoclips are non-pyrogenic and supplied non-sterile, but may be autoclaved. Ideal for use with laboratory mice and rats.

MODEL	DESCRIPTION
ACS-KIT	Autoclip Starter Kit (includes applier, remover, and 1,000 clips)
ACS-APL	Autoclip Applier
ACS-RMV	Autoclip Remover
ACS-BX	Autoclips 100/box
ACS-CS	Autoclips 1,000/case

Basic Sutures for Small Animal Surgery



Non-absorbable natural silk

The softness of natural silk has been preserved in this high-grade suture.

MODEL	SIZE	MATERIAL	LENGTH
Spools			
SUT-S-103	7-0	Silk	100 yds
SUT-S-104	6-0	Silk	100 yds
SUT-S-106	5-0	Silk	100 yds
SUT-S-108	4-0	Silk	100 yds
SUT-S-110	3-0	Silk	100 yds
SUT-S-113	2-0	Silk	100 yds
SUT-S-116	0	Silk	100 yds
SUT-S-119	1	Silk	100 yds

MODEL	DESCRIPTION	SIZE	MATERIAL	LENGTH
Spools with swagged needles				
SUT-1074	0.375" circle reverse cutting	3-0	Silk	18"
SUT-7116	0.5" circle taper point double needle	4-0	Silk	24"
SUT-9403	Straight taper	3-0	Silk	30"

Surgical Instruments



Technocut® Plus Disposable Safety Scalpels

The safety and performance you need



- ▶ Fully extended blade enables clear line of sight
- ▶ Top activation allows for ambidextrous use
- ▶ Fully enclosed front enhances blade stability and security
- ▶ Audible clicks help confirm proper blade position
- ▶ Final lock for safe handling and disposal
- ▶ Non-slip ergonomic handle with metric scale
- ▶ Color coded slider button for easy blade size identification

- ▶ Highest quality standards
- ▶ Uses premium GLASSVAN® blades. Computerized grinding and proprietary polishing processes for the blades ensure consistent, clean, sharp cutting edges
- ▶ Scalpel blades produced from high quality, high durability Swiss stainless steel
- ▶ Scalpels manufactured in ISO 13485 certified facilities

MODEL	SIZE/CS/BX
SSS-10	#10
SSS-11	#11
SSS-12	#12
SSS-15	#15
SSS-20	#20

*10 sterile scalpels per box, 5 boxes per case



Disposable Stainless Steel Safety Scalpel

Engineered for safety and simplicity. Complies with the OSHA directive by providing a fully retractable scalpel blade, which protects the user from accidental needle sticks associated with traditional scalpels.

Reusable sterile stainless dissecting surgical blades and handles also available – call for size and pricing.

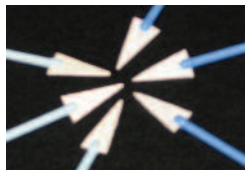
Supplied sterile. Single use.



MODEL	SIZE
45-10	#10
45-11	#11
45-12	#12
45-15	#15
45-22	#22

*10 scalpels per box.

Surgical Spears



Disposable, super absorbent surgical spears for use during ophthalmic and other microsurgical procedures. Available in cellulose and PVA.

Supplied sterile.

MODEL	DESCRIPTION
SP-40400	PVA Surgical Spears
SP-40410	Cellulose Surgical Spear

*5 spears per pack, 20 packs per box.

Micro Clip Setting Forceps

MODEL	DESCRIPTION
FC148	4.75"L

Micro Vascular Clips

MODEL	OCCCLUSION PRESSURE	VESSEL DIA.	LENGTH
MVC-00	10-15g	1mm	8mm
MVC-02	15-20g	1-2mm	11mm
MVC-04	20-30g	2-3mm	14mm

Specialty Scissors

Iris Scissors



For precise vascular and neurological dissection. Ideal for small specimens. 4.5", (114.3mm)

MODEL	DESCRIPTION
SC-I-128	Std. Pattern, Straight
SC-I-129	Std. Pattern, Curved
SC-I-130	Std. Pattern, Angled

Scissors

SuperCut Scissors

Manufactured with the highest grade surgical stainless steel. Tempered and hardened for a longer sharper life. The SuperCut blade has a specially designed razor sharp edge.

Tungsten Carbide Scissors

Unique tungsten carbide cutting edges provide effortless yet accurate cuts through the toughest tissue. Shanks are tempered to allow proper flexibility and comfort. Finger rings are well rounded and polished allowing better feel while preventing finger fatigue.

MODEL	DESCRIPTION
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SuperCut Surgical Scissors - Sharp/Blunt

SCT-S-508 Surgical Scissors - Straight 5.5" (139.7mm)
SCT-S-511 Surgical Scissors - Curved 5.5" (139.7mm)

SuperCut Metzenbaum Scissors - Delicate

SCT-M-523 Straight, 4.5" (114.3mm)
SCT-M-525 Curved, 4.5" (114.3mm)

SuperCut Iris Scissors

SCT-I-528 Straight 4.5" (114.3mm)
SCT-I-529 Curved 4.5" (114.3mm)

Tungsten Carbide - Iris Scissors

SC-T-405 Straight, 4.5" (114.3mm)
SC-T-406 Curved, 4.5" (114.3mm)

Dissection Scissors

Metzenbaum Scissors

A unique combination of narrow blunted points along with thin delicate shafts for delicate dissection and minimal damage to surrounding tissues.

MODEL	DESCRIPTION
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SC-M-125 Curved, Delicate, 5.5" (139.7mm)
SC-M-126 Curved, Delicate, 7" (177.8mm)
SC-M-180 Curved, Std. Pattern, 5.5" (139.7mm)
SC-M-182 Curved, Std. Pattern, 7" (177.8mm)

Single Use Surgical Instruments



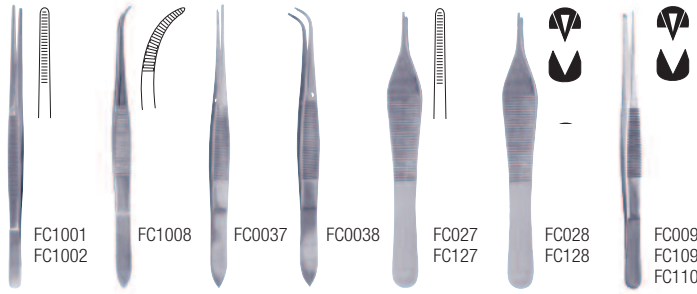
ST5-120 ST5-124 ST5-16 ST5-304 ST6-118 ST7-2 ST7-36

MODEL	DESCRIPTION	QTY
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ST5-120	Mayo, 5.5", Straight, Blunt	50/bx
ST5-124	Mayo, 6.75", Straight, Blunt	50/bx
ST5-16	OR Scissor, 5.5", Straight, Sharp/Blunt	50/bx
ST5-180	Metzenbaum, 5.5", Curved	50/bx
ST5-182	Metzenbaum, 7", Curved	50/bx
ST5-304	Iris Scissor, 4.5", Straight	50/bx
ST5-306	Iris Scissor, 4.5", Curved	50/bx
ST6-118	Adson Forcep, 4.75"	50/bx
ST6-120	Adson Forcep, 4.75", 1x2	50/bx
ST6-44	Tissue Forcep, 5.5", 1x2	50/bx
ST6-8	Dressing Forcep, 5.5"	50/bx
ST7-2	Halstead Forceps, 5", Straight	50/bx
ST7-4	Halstead Forceps, 5", Curved	50/bx
ST7-36	Kelly Forceps, 5.5", Straight	50/bx
ST7-38	Kelly Forceps, 5.5", Curved	50/bx



Forceps



Premium Grade Dressing Forceps

Serrated tips and ribbed grip to assist with delicate dissection. Standard pattern, serrated handle.

MODEL	DESCRIPTION
-------	-------------

Standard Pattern, serrated handles

FC-1001	Premium Grade 4.5" (114.3mm)
FC-1002	Premium Grade 5" (127mm)

Curved, delicate narrow tips

FC-1008	Premium Grade 5" (127mm)
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Iris Tissue Forceps

Sharp 1 x 2 interlocking teeth for secure grip with minimal tissue compression.

MODEL	DESCRIPTION
-------	-------------

FC-0037	Straight, 1 x 2 teeth, 4" (101.6mm)
FC-0038	Full curved, 1 x 2 teeth, 4" (101.6mm)

Adson Forceps

Extra broad ribbed grip for delicate precision dissection. Available with serrated or toothed tips.

MODEL	DESCRIPTION
-------	-------------

Standard Grade

FC-027	Dressing, serrated, 4.75" (120.7mm)
FC-028	Tissue 1 x 2 teeth, 4.75" (120.7mm)

Premium Grade

FC-127	Dressing, serrated, 4.75" (120.7mm)
FC-128	Tissue 1 x 2 teeth, 4.75" (120.7mm)

Delicate Specialty Dissection Forceps

MODEL	DESCRIPTION
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Delicate Tissue Forceps

FC-032	Serrated, 5" (127mm)
FC-033	Tissue, 1 x 2 teeth, 5" (127mm)
FC-0341	Fine Point, 4.5" (127mm)

Standard Pattern Tissue Forceps

Secure ribbed grip.

MODEL	DESCRIPTION
-------	-------------

Standard Pattern, Serrated Handles, 1 x 2 Teeth

FC-109	Premium, 4.5" (114.3mm)
FC-110	Premium, 5" (127mm)
FC-111	Standard Grade, 4.5" (114.3mm)

Dumont Forceps

MODEL	DESCRIPTION
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FC-5005	109mm Inox, 45° angle, tip 0.05 x 0.01mm
FC-5058	109mm Dumoxel, 45° angle, tip 0.10 x 0.06mm
FC-5043	110mm Inox, straight, 11cm

Micro Instruments



Micro Scissors

Very delicate scissors for precision dissection. Excellent for small animal dissection.

MODEL	DESCRIPTION
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Micro Iris Scissors

SC-MI-150	Straight, sharp points, 4" (101.6mm)
SC-MI-151	Curved, sharp points, 4" (101.6mm)

Micro Scissors

SC-MS-152	Straight, superfine blades, 3.25" (82.5mm)
SC-MS-153	Curved, superfine blades, 3.25" (82.5mm)
SC-MS-154	Right Angle 4"
SC-MS-155	Left Angle 4"

Premium Grade Micro-Tissue Forceps

FC-145	Curved Tip 4.25" (107.95mm)
FC-146	Narrow Fine Tip 4.25" (120mm)
FC-147	Super Fine Tip 4.25" (107.95mm)

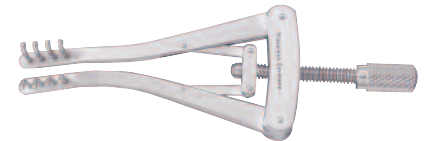
Alm Retractor

Specifications:

Spread: 2.75" (7cm)

Prongs: 2.25" (5.7cm)

Depth: 0.125" (0.32cm)



MODEL	DESCRIPTION
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ALM-112	Alm Retractor
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Instrument Cases

Biocon: Extremely durable; easy to open, yet remains tightly shut when not in use.

MODEL	DESCRIPTION
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CS-7550	Holds up to 8 instruments in separate compartments
CS-7575	Holds up to 10 instruments in separate compartments

Zippered: Velveteen-lined case with "leather-look" vinyl exterior; zips closed around three sides

MODEL	DESCRIPTION
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CS-7700	Holds up to 12 instruments
---------	----------------------------

Bone Wax

- ▶ Bone wax is used to control bleeding in procedures that involve cutting through bones, such as thoracic, neurosurgery, orthopedic, oral and maxillofacial surgeries.
- ▶ Soft and easy to form and apply.
- ▶ Each easy-to-open foil package contains 2.5 grams of wax.



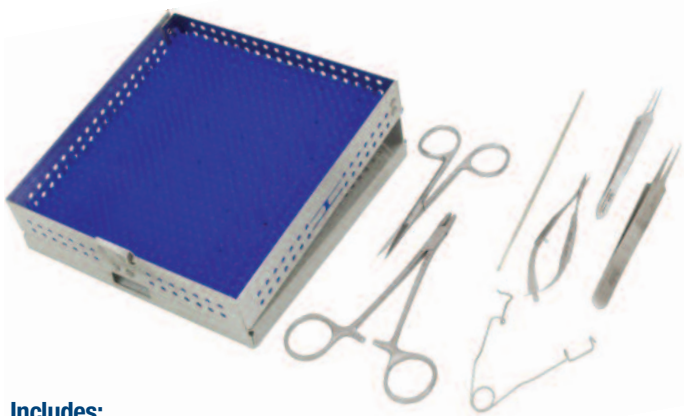
MODEL	DESCRIPTION	QTY
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DYNJ-BW26	Sterile Synthetic Bone Wax.	12/bx
DYNJ-BW25	Sterile Natural Non-Bleached Beeswax.	12/bx

Extensive selection of instruments available.
Please email info@BraintreeSci.com for details and pricing.



Microsurgical Instrument Kit



Includes:

- ▶ Derf needle holder: grated jaws, 4000 teeth per square inch, 4.75" (12.1cm)
- ▶ Iris scissors: straight, 4" (10.2cm)
- ▶ Swiss jeweler style forceps: non-magnetic stainless steel, style 5, micro-fine, 4.375" (11.2cm)
- ▶ McPherson micro iris suturing forceps: straight, smooth platform 0.3mm x 5mm, no teeth, 3.5" (8.9cm)
- ▶ McPherson-Vannas micro iris scissors: straight, sharp points, 3.25" (8.3cm)
- ▶ PlainWire eye speculum: blades 15mm wide, 2.5" (6.4cm)
- ▶ Probe: double ended, malleable, sterling, 4.5" (11.4cm)
- ▶ Storage cassette: 6.5" x 6.25" x 1.25"
- ▶ Storage cassette mat

MODEL	DESCRIPTION
MSK-6890	Microsurgical Instrument Kit
MSK-6890-NC	Kit without Storage Cassette and Mat

Rodent Dental Kit

Motorized dental kit provides necessary instruments to help treat commonly encountered dental problems in rodents.

Kit includes: small, medium and large cheek dilator, mouth gag, periodontal probe, flat and concave tongue spatulas, incisor and molar luxator, 5 piece burr set, burr cones, burr guard, diamond disc, safety shield and case.



MODEL	DESCRIPTION
ECK-177350	Rodent Dental Kit

Rat and Mouse Dissection Kits



MDK-R

Rat kit includes: Dumont forceps #5, Vannas scissors, SuperCut iris scissors, straight, Alm retractor, needle holder, blunt probe, zippered case



MDK-M

Mouse kit includes: Dumont forceps #5, Vannas scissors, Dissecting scissors, Wire retractor, needle holder, blunt probe, zippered case

MODEL	DESCRIPTION
MDK-R	Rat Dissection Kit
MDK-M	Mouse Dissection Kit

Ideal Micro-Drill™



Designed for research applications that require surgical burrs and trephines. Drill is constructed of light-weight aluminum alloy for balance and control and powered by a rechargeable 6-volt nickel cadmium battery. Under normal operating conditions unit will function for 8 hours between charges. Drill comes with five burrs: 0.6mm, 0.8mm, 1mm, 1.2mm, 1.6mm

- ▶ Rechargeable
- ▶ Light-weight design
- ▶ No special tools needed to change burrs
- ▶ Hard plastic case with die-cut foam for convenient storage
- ▶ Excellent balance and handling

Specifications:

Length (without burr): 17.5cm

Diameter: 1.9cm

Power: 6-Volts DC

Speed: 12,000 rpm

Stall torque: 1.25 oz/in

MODEL	DESCRIPTION
MD-1200	Ideal Micro-Drill™



Sentry Ultrasonic Cleaner

Sentry Ultrasonic Cleaner is a high-efficiency cleaner specially developed to clean surgical instruments. Ultrasonic waves pump micron-sized bubbles into the water. Bubbles fit into the tightest spaces which would be impossible to clean by traditional methods. When bubbles implode, water hits the instrument at speeds up to 250 mph providing a very powerful cleaning action.



- ▶ High-capacity elongated tank easily accommodates long surgical instruments and other equipment that may not fit into desktop ultrasonic cleaners.
- ▶ Uses a powerful generator to create ultrasonic waves that provide effective cleaning action. When heavy bio-burden or oily residue is present, Sentry's cleaning power can be enhanced with a heating feature that warms water up to 65°C.
- ▶ Operates quietly without disrupting work in laboratory. Lid decreases noise and includes a viewing window to monitor progress.
- ▶ Takes up little space for convenient storage on lab bench. Light weight for easy transport or storage.

MODEL	DESCRIPTION
ULTRA-9911	Sentry Ultrasonic Cleaner

Infrared Microsterilizer



BactiZapper™ has an asbestos-free core element that uses infrared heating to produce 815°C (1500°F). It completely sterilizes micro-

organisms in 5-7 seconds. BactiZapper uses well-proven technology to provide instant sterilization of platinum inoculating loops, needles, glass tube pipette mouths and various metal and borosilicate glass instruments. Ceramic heating element is safely enclosed in a perforated stainless steel guard chamber, protecting users from accidental contact with extreme temperatures of the core area. It is extremely compact, convenient and can be used in anaerobic and aerobic chambers.

- ▶ Complete infrared sterilization in 5-7 seconds
- ▶ Safe, convenient and no spatter
- ▶ Ideal for platinum loops, needles and tube mouths

Specifications:

Max temperature: 815° C/1500° F

Sterilization: 5-7 secs

Chamber diameter: 0.55"/14mm

Chamber length: 3.94"/100mm

External dimensions: 4" x 6" x 6.5"



MODEL	DESCRIPTION
B1000	BactiZapper Infrared Microsterilizer



Germinator 500

Dry sterilize surgical instruments in seconds



NIH guidelines recommend sterilizing instruments for small animal surgery. Hot glass bead sterilizers are ideal for this application. **Stays cool to the touch** - the chassis stays cool, even at the end of a full day of operation. Air above unit is cool enough to insert an instrument into well without discomfort. Insert surgical instrument into well, sterilization of inserted parts by dry heat (250°C) takes 2-5 seconds. Handles of instruments, outside heat, do not get hot. Metal in beads is heated only on the surface,

not to the depth, so cooling is quick after removal. Within 30 seconds, surgical instruments are cool enough to use.

Specifications:

Warm up time: 20 min.

Working temp: 250°C (approximately 500°F)

Sterilization time: 2-5 sec.

Well size: 20cm deep x 5cm diameter.

Beads eventually, after extensive use, wear to powder. Replace when it becomes difficult to push instruments in deep enough.

MODEL	DESCRIPTION
GER-5287	Dry Sterilizer
GER-5289	Glass Bead Refill Package

Micro Bead Sterilizer

- ▶ Digital control, up to 300°C
- ▶ Sterilizes forceps, needles and other tools (generally in 15 seconds)
- ▶ Eliminates the danger associated with open flames
- ▶ Tall model, for sterilization of larger objects



Ideal for sterilization of small research tools (forceps, scissors, etc.). When chamber is filled with included glass beads, high temperatures (up to 300°C) can be used to eliminate presence of bacteria, spores and other microorganisms.

Chamber temperature can be viewed on large LED control panel and conveniently adjusted with control knob. Outer casing of unit stays cool to touch, even when sterilizer is used all day. Supplied safety cover can be placed over opening to conserve energy and reduce heating/ramping rate. Micro Bead Sterilizer does not use gas, flame or chemicals and is safe for use in hoods. With adjustable temperature, application range of sterilizer can also be expanded into incubations and decontamination of plastic objects/tools.

Designed for RESEARCH USE ONLY. Not intended for clinical use.

MODEL	DESCRIPTION
MB-1201	Micro-Bead Sterilizer, chamber height 80mm
MB-1202	Micro-Bead Sterilizer, Tall, chamber height 140mm
MB-1201-BEAD	Micro-Bead Sterilizer glass replacement beads only



New! Change-A-Tip Deluxe Kits



DEL-1



DEL-2

Replaceable battery and tip cauteries are the next advance in battery operated cauteries where reusability is a must. Excellent for office, ER, and clinical procedures. Can be purchased as DEL-0, DEL-1 or DEL-2 pre-packaged Change-A-Tip cautery and tip kits or individually in high or low temperature models with a variety of tips for various procedural needs.

MODEL	DESCRIPTION
DEL-0	Change-A-Tip deluxe low-temp cautery kit (includes one low-temperature handle, two DEL100 non-sterile tips, two DEL104 non-sterile tips, one "AA" battery and a foam-lined case)
DEL-1	Change-A-Tip deluxe high-temp cautery kit (includes one handle, two DEL101 non-sterile tips, two DEL103 non-sterile tips, two "AA" alkaline batteries and a foam-lined case)
DEL-2	Change-A-Tip deluxe HI-LO cautery kit (includes one low-temperature handle, one hightemp handle, one sterile DEL-100 tip, one sterile DEL-101 tip, one sterile DEL-103 tip, one sterile DEL-121 tip, six "AA" alkaline batteries and a foam-lined case)

Change-A-Tip Replacement Tips

DEL-100	Low-Temp Fine Tip (10/box)
DEL-101	High-Temp Fine Tip (10/box)
DEL-103	High-Temp Loop Tip (10/box)
DEL-104	Low-Temp Elongated Fine Tip (10/box)

Additional sizes available online at www.BraintreeSci.com

Gemini Cautery System

Dual Operating Temperatures

Battery operated system provides two different operating temperatures: 1300°F and 2200°F. Easily replaceable, autoclavable, nickel-chrome tips require less power and provide longer battery life. Convenient battery spacer converts hand piece from high temp to low temp. Comes complete with standard AA batteries, battery spacer, 2 each tips - sizes 5mm and 10mm, all in a hard plastic case with die cut foam for convenient storage.



MODEL	DESCRIPTION
GEM-5917	Gemini Cautery System
GEM-5918	Replacement Tips, 5 x 1mm (box of 10)
GEM-5919	Replacement Tips, 10 x 1mm (box of 10)

New! Freezpoint Cryosurgery Device

Cryosurgery is a popular treatment for simple skin lesions. The Freezpoint is a safer, easier, and colder device, that delivers an improved, low cost per procedure, cryosurgical option. The Freezpoint device is 27% - 62% colder than common multi-use disposable systems. Slim tip design aids in clear visualization of the lesion for precise delivery of -89°C, non-flammable, Nitrous Oxide therapy. Very safe, clinically effective treatment with reduced tissue damage to surrounding healthy skin.



MODEL	DESCRIPTION
CRY-16	Freezpoint Cryosurgical Device, 16g
CRY-8	Freezpoint Cryosurgical Device, 8g
CRY-16-2	Freezpoint Cryosurgical Device, 16g, 2/pack



Clippers and Trimmers

BravMini+ Trimmer

- Professional power cordless trimmer works best for all over trimming
- NiMH battery with 2 hour quick full charge time
- Cool running with 100 minutes of cordless operation
- Exceptionally quiet
- Glides through coats quickly and efficiently with low vibration
- Quiet enough for sensitive or shy animals but has the power to get the job done



Kit includes: Professional cordless BravMini+ Trimmer, snap on and off #30 trimmer blade (1/32" cut), 5 position adjustable attachment comb (3mm to 6mm), charging stand, blade oil, cleaning brush and instruction book.

MODEL	DESCRIPTION
CLP-41590-R	BravMini+ Cordless Trimmer, red
CLP-41590-P	BravMini+ Cordless Trimmer, purple
CLP-41590-7370B	#30 Replacement Blade
CLP-41590-7840B	Designer 1/2" Replacement Blade

Arco SE Professional Cordless Clipper

- Powerful 5,500 SPMs with 80 minute cordless runtime
- Always cool running clipper and blade with continuous cordless operation
- No maintenance motor, exceptionally lightweight and amazingly quiet
- Non-stop drop-in NiMH rechargeable battery provides constant clipping power
- Ergonomic clipper is easy to clean and maintain
- Includes #45 non-adjustable surgical cut blade



Kit includes: Professional cordless clipper; #45 (1/50) non-adjustable surgical cut, detachable blade set, 2 drop-in NiMH rechargeable battery packs, charging base with indicator light, soft storage case, 4 attachment guide combs (#3, #6, #9, #12), cleaning brush, blade oil and instruction book.

MODEL	DESCRIPTION
CLP-8786-1101	Arco SE Professional Cordless Clipper
CLP-8786-7190B	#45 Replacement Blade



Arco SE Professional '5 in 1' Blade Cordless Clipper

- ▶ Professional cordless '5 in 1' blade clipper kit with 2 NiMH batteries and unsurpassed cutting performance
- ▶ Lightweight and powerful, 5,500 strokes per minute with adjustable '5 in 1' blade with sizes #9, #10, #15, #30 and #40
- ▶ Clipper and blade are always cool running and clipper is amazingly quiet.
- ▶ Continuous cordless operation with dual-charge battery packs



Kit includes: Cordless clipper, 2 NiMH batteries for continuous runtime, '5 in 1' adjustable blade, bonus dvd: "The fundamentals and essentials of tech grooming", charging base, 4 snap-on guide combs (#3, #6, #9, and #12), cleaning brush, blade oil, blade guard and instructions.

MODEL	DESCRIPTION
CLP-8786-451A	Arco Professional Cordless Clipper, '5 in 1' blade

KM5 2-Speed Professional Clipper

- ▶ German engineered professional 2-speed rotary motor clipper with superior power and torque.
- ▶ Features constant speed control which automatically delivers more power when needed while clipping through mats and thick coats making quick work of tough situations. Proven increased power and torque while being extremely quiet.
- ▶ Features an ergonomic and lightweight body shape for increased comfort and control with all the benefits of being correctly-balanced and minimal vibration for reduced wrist fatigue.
- ▶ #10 ultimate competition series blade set for better clipping performance
- ▶ Excellent blade system: blades stay secure and are easily detachable



Kit includes: Professional 2-speed rotary motor clipper with 14 ft. flexible cord, ultimate competition series #10 detachable blade set, blade oil, cleaning brush and instruction book.

MODEL	DESCRIPTION
CLP-9787-03	KM5 2-Speed Professional Corded Clipper
CLP-9787-2352B	#40 Replacement Blade
CLP-9787-2358B	#10 Replacement Blade

MiniARCO

- ▶ Unsurpassed rotary motor is very fast and powerful
- ▶ Cordless operation for convenience
- ▶ Lightweight, quiet and cool running
- ▶ Superior quick detachable blade set

Kit includes: Trimmer, charger, detachable #30 blade set, cleaning brush, blade oil, two dual-sided guide combs and instruction book.



MODEL	DESCRIPTION
CLP-8787-450A	MiniArco Professional Cordless Trimmer
CLP-8787-7370B	#30 Replacement Blade
CLP-8787-2179-100B	Designer 1/2" Replacement Blade

Super AGR+ Cordless Rechargeable Animal Clipper with Sensa-Charge

A powerful rechargeable clipper designed for all day heavy-duty use. Clipper will run continuously for one hour with a fully charged battery pack – recharges within one hour. Maintenance free, no oiling or greasing of internal parts. Detachable blades for ease of changing and cleaning. High speed motor, 3600 strokes per minute (3600 rpm). Special refresh button recharges and conditions battery to maximum performance overnight. On/Off switch with lock, break resistant housing, contoured to fit your hand. All Andis® AG and Oster® A5 Blades fit Super AGR+ Clipper. Push button blade release locks blade into position until changing of blade is desired.



Power Pack is a high capacity battery pack for extended run time. Battery can be charged separately from clipper. Additional rechargeable battery packs available. Home base is equipped with Sensa-Charge® a unique charging system that will not overcharge battery. LED lights indicate charging mode. Recharges and conditions battery to maximum performance.

MODEL	DESCRIPTION
CLP-64800	Super Professional Rechargeable Clipper

Replacement Blades

CLP-64084B	#40 Surgical S/S Detachable
CLP-64071B	#10 Medium Cut Detachable Blade
CLP-64160B	Ultrafine Blade Surgical S/S Detachable

Miscellaneous Accessories

CLP-64710	Super Professional Charger
CLP-64715	Super Professional Battery Pack

Battery Operated Trimmer Set



Kit includes: Battery operated trimmer, touch-up trimmer, storage base, 6-position attachment comb, 3 attachment combs, 3 AA batteries, blade oil, cleaning brush.

MODEL	DESCRIPTION
CLP-9990	Battery Operated Trimmer Set
CLP-9990-1001B	Trimmer Replacement Blade



MiniFigura Cordless Trimmer

- ▶ Professional power lithium ion rechargeable trimmer works great for surgical prep and trimming
- ▶ Easy to snap on and off high performance super surgical prep and trimming
- ▶ Quiet, lightweight and powerful with up to 6,000 strokes per minute and low vibration
- ▶ New lithium ion battery technology gives optimal performance
- ▶ Cool running with 75 minutes of cordless operation and only a 60 minute quick full charge time
- ▶ Ergonomic curved design allows comfort and control for all of your trimming needs

Kit includes: Professional lithium ion rechargeable trimmer, super surgical detachable trimmer blade (1/64" cut length), charge stand, four attachment guide combs (#1 1/8 cut, #2 1/4 cut, #3 1/3 cut and #4 1/2 cut), blade oil, cleaning brush and instruction book.



MODEL	DESCRIPTION
CLP-9868-14	MiniFigura Cordless Trimmer
CLP-9868-2111	#40 Replacement Blade

Pocket Pro Pet Trimmer

Light-duty trimmer ideal for precision trimming and great for touch-ups

- ▶ Compact size easily fits in palm of hand
- ▶ High carbon precision ground steel blades stay sharper longer
- ▶ Cordless, battery operated for convenient use anywhere



MODEL	DESCRIPTION
CLP-9931-B	Pocket Pro Pet Trimmer, blue
CLP-9931-P	Pocket Pro Pet Trimmer, purple

Super Pocket Pro Battery Operated Trimmer

- ▶ Durable black chrome body
- ▶ Quieter and more powerful than original Pocket Pro
- ▶ 4" long and weighs 3 oz.
- ▶ Cordless with up to 6,000 strokes per minute – ideal for precision trimming on ears and paws
- ▶ Includes: Trimmer with #40 blade and bonus #40 T-Blade, 6-position length guide, 1 AA battery, 2 attachment guide combs, travel pouch, cleaning brush, blade oil, blade guard and instructions



MODEL	DESCRIPTION
CLP-9961-2801	Super Pocket Pro Battery Operated Trimmer



Surgical Tables and Boards

Grace Small Animal Procedure/Dissection Boards

Boards are made of 1" thick high density polyethylene (HDPE) with excellent chemical resistance, easy-to-clean, solid work surface.

Procedure/Dissection Board (GPS1)

- ▶ Size: 12"L x 8"W
- ▶ Non-skid feet for added stability

Procedure/Dissection Board with Magnetic Base System (GPM1)

- ▶ Same features and size as GPS1 procedure/dissection board
- ▶ Magnetic base system

Procedure/Dissection Board with LED, Magnifier and Magnetic Base System (GPM2)

- ▶ Size: 12"L x 9.5"W
- ▶ Two flexible LED lights provide direct illumination without shadows or heat
- ▶ Flex arm, non-obstructive rimless magnifying glass (main lens: 2.3X, inset lens: 4.0X) allows continuous eye contact with object when moving into magnification area
- ▶ Universal input power supply (100-240 VAC, 50-60 Hz)
- ▶ Non-skid feet for added stability

Procedure/Dissection Board with LED, and Magnifier (GPS2):

- ▶ Same features and size as GSM2 procedure/dissection board
- ▶ Magnetic base system

Large Magnetic Drape Holders (GDH-L) Set of 4

Small Magnetic Drape Holders (GDH-S) Set of 4

Magnetic Limb Restraints (GLR1) Set of 4

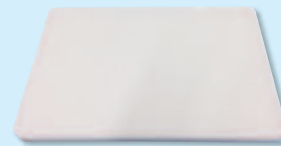
Magnetic LED Light (GLED)

Universal input power supply 100 – 240 VAC, 50-60 Hz)

Magnetic Magnifier (GMAG)

Main lens 2.3X, inset lens 4.0X

GPS1



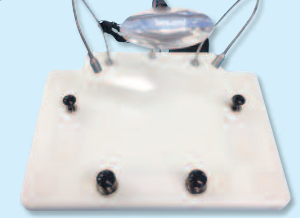
GPM1



GPS2



GPM2



MODEL	DESCRIPTION
GP-S1	Procedure/Dissection Board
GP-M1	Procedure/Dissection Board with Magnetic Base System
GP-S2	Procedure/Dissection Board with LED and Magnifier
GP-M2	Procedure/Dissection Board with LED, Magnifier and Magnetic Base System

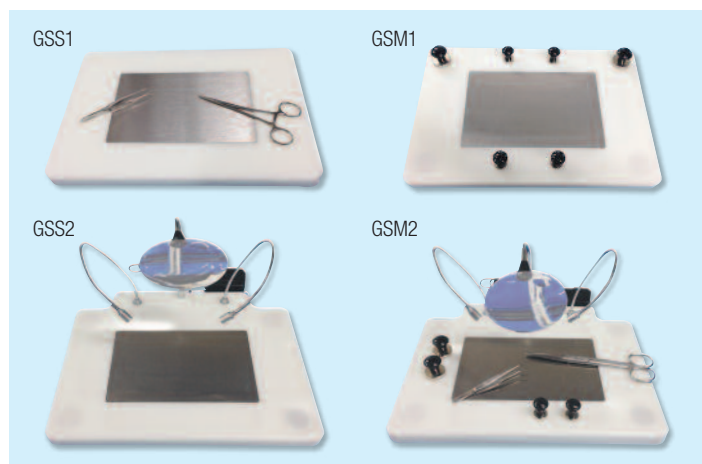
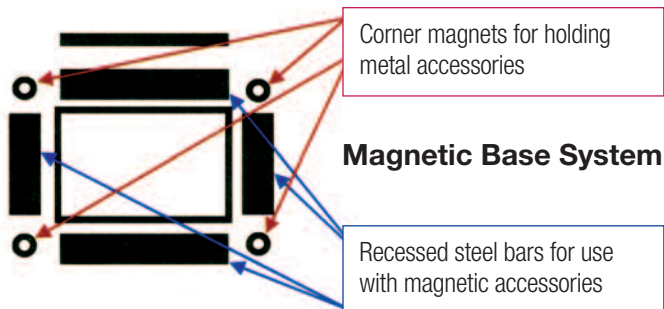
Accessories for Magnetic Base:

MODEL	DESCRIPTION
GDH-L	Large Magnetic Drape Holders, set of 4
GDH-S	Small Magnetic Drape Holders, set of 4
GLR1	Magnetic Limb Restraints, set of 4
GLED	Magnetic LED Light
GMAG	Magnetic Magnifier



Grace Small Animal Surgery Boards

Boards are made of 1" thick high density polyethylene (HDPE) with excellent chemical resistance, easy-to-clean, solid work surface.



Warming Thermal Plate or Cooling Hypothermic Plate

Grace Surgery Board (GSS1)

- Size: 12"L x 8"W
- 7" x 4" 1x magnetic stainless steel warming plate
- One Space Gel heating pad
- Suction cup limb restraints
- Non-skid feet for added stability

Grace Surgery Board with Magnetic Base System (GSM1)

- Same features and size as GSS1 surgery board
- Magnetic base system

Grace Surgery Board with LED and Magnifier (GSS2)

- Size: 12"L x 9.5"W
- 7" x 4" 1x magnetic stainless steel warming plate
- One Space Gel heating pad
- Suction cup limb restraints
- Two flexible LED lights provide direct illumination without shadows or heat
- Flex arm, non-obstructive rimless magnifying glass (main lens: 2.3X, inset lens: 4.0X) allows continuous eye contact with object when moving into magnification area
- Universal input power supply (100-240 VAC, 50-60 Hz)
- Non-skid feet for added stability

Grace Surgery Board with LED, Magnifier and Magnetic Base System (GSM2)

- Same features and size as GSS2 surgery board
- Magnetic base system



Thermal Plate Heating Options

DC powered thermal plate (GETP)

Use with GVT1, GPS1, GPS2, GPS3

Variable Temp Controller (GVT1)

Set any plate temp. Use with GETP.

Single Temp Power Supply

Provides a single constant plate temp. Use with GETP. *Note: Final plate temp is dependent on room temp.*

GPP-1: 30°C

GPP-2: 34°C

GPP-3: 38°C

Space Gel Heating Pad (SPGL-S)

33-34°C can be reactivated. For use with standard thermal plate.

Thermal Drape (SP-TS)

12" x 16", non-sterile, 2 pack. Keeps animal warm or cold during surgery.

Hypothermic Cooling Plate (GBHP)

For use with ice, 3-4°C.

MODEL	DESCRIPTION
GSS1	Surgery Board
GSM1	Surgery Board with Magnetic Base System
GSS2	Surgery Board with LED and Magnifier
GSM2	Grace Surgery Board with LED, Magnifier and Magnetic Base System
GETP	DC Powered Thermal Plate
GVT1	Variable Temp Controller
GPP-1	Single Temp Power Supply - 30°C
GPP-2	Single Temp Power Supply - 34°C
GPP-3	Single Temp Power Supply - 38°C
DP-SASB	Deltaphase Heating Pad
SPGL-S	Space Gel Heating Pad
SP-TS	Thermal Drape (12" x 16") non-sterile, 2 pk
GBHP	Hypothermic Cooling Plate

Accessories for Magnetic Base:

MODEL	DESCRIPTION
GDH-L	Large Magnetic Drape Holders, set of 4
GDH-S	Small Magnetic Drape Holders, set of 4
GLR1	Magnetic Limb Restraints, set of 4
GLD	Magnetic LED Light
GMAG	Magnetic Magnifier



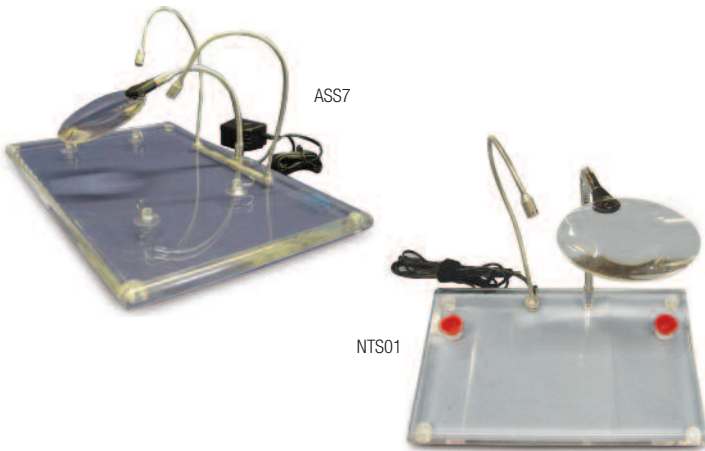
Dissection Tray

Add a dissection tray with a wax base pinning surface for *detailed* dissections!



MODEL	DESCRIPTION
DTW1	Dissection Tray 9.5" x 7" x 1"
DTW5	Dissection Tray (five trays per pack)

Surgery and Micro Tattooing Platform



Can be used for surgery, micro manipulations, general micro-utility platform (i.e. organ inspections, dissections, etc.).

- ▶ Flex arm, non-obstructive rimless magnifying glass (main lens: 2.3 X; inset lens: 4.0 X)
- ▶ Non-skid feet for added stability.
- ▶ Universal input power supply (100-240 VAC, 50-60 Hz)

Surgery Platform:

- ▶ Two flexible LED lights - provides direct illumination, no shadows and no heat
- ▶ Limb restraints
- ▶ Size: 9"x13.5"

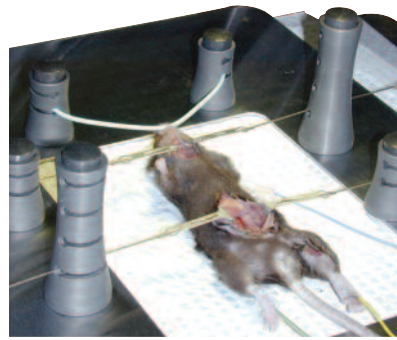
Micro Tattooing Platform:

- ▶ One Flexible LED light - provides direct illumination with no heat
- ▶ Cup holders (1.5ml)
- ▶ Size: 6" x 9"

MODEL	DESCRIPTION
ASS7	Surgery Platform
NTS01	Micro Tattooing Platform



Small Animal Surgery System



The small animal surgery system sets a new standard of procedural control. The fully integrated procedural and stabilization system provides precisely controlled retraction at the operative site. The CD+ Labs System allows researchers to operate independently eliminating the need for an assistant or improvised assistive devices.

The system removes the complexities and distractions of improvised set-ups, allowing the researcher to focus full attention on the surgical procedure.

- ▶ Eliminates the need for an assistant
- ▶ Reduces setup and procedure time
- ▶ Provides superior control
- ▶ Improves visualization

Animal tables are made of ferro-magnetic steel and incorporate a window for compatibility with body temperature maintenance systems.

Fixators hold retractors. Contain rare earth magnets that attach anywhere on the animal table. A push-button top operates multi-level locking jaws that grip wire or elastomers firmly. They can be adjusted linearly or rotationally with finger-tip release. Complete depression of the push-button allows for insertion of the wire or elastomer while partial depression of the push-button allows for adjustment. Fixators can also lock onto other lab components that require stabilization in the surgical setting, such as neurological or rectal probes or anesthesia delivery systems. The magnetic field is well controlled within the fixator to minimize interference with sensitive instrumentation.

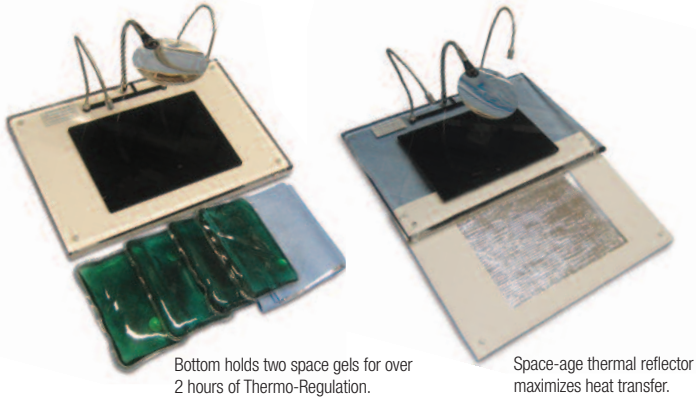
Retractor wires are formed from light, flexible stainless steel. Retractor wires can be used on their own to retract or manipulate tissue, or fitted to provide a wide range of retractor styles. Retractor wires engage and lock into the fixator jaws at the desired elevation allowing both linear and rotational adjustment over the entire length of the wire. One end of the wire is formed in a loop to provide grip for a gloved hand, and the business end is formed into a right angle hook that can retract on its own or lock to a range of retractor tips. Can also be reformed to create restraints or engage other lab apparatus that need to be secured in the surgical field. Wires are available in 10cm and 14cm lengths for mouse and rat procedures. Retractor tip widths range from 1mm to 7.5mm, plus a single point, sharp tissue hook. Each tip can be locked onto a wire for static retraction or affixed to an elastomer to form a dynamic retractor.

MODEL	DESCRIPTION
ACD-014	Small Animal Set (Mouse)
ACD-015	Medium Animal Set (Rat)
ACD-001	Fixator-magnetic -1"-two slot (1/pk)
ACD-002	Fixator- magnetic-2"-4 slot (1/pk)
ACD-005	Retractor, Wire Handle- 4" (10/pk)
ACD-006	Retractor, Wire Handle- 6" (10/pk)
ACD-007	Lab System Elastomer- 2 meter roll
ACD-008	Retractor -sample pack (2 each style, 5 sizes)
ACD-009	Retractor-sharp-single prong (10/pk)
ACD-010	Retractor- 1mm (10/pk)
ACD-011	Retractor-2.5mm (10/pk)
ACD-012	Retractor- 5mm (10/pk)
ACD-013	Retractor- 7.5mm (10/pk)



Thermo Controlled Surgery Platform

Easily maintain animal body temperature during surgery!



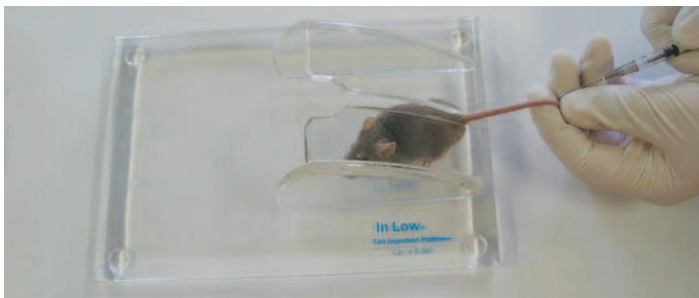
- ▶ Two flexible LED lights provide direct illumination with no shadows and no heat
- ▶ Thermo reflector and turbo heat sink to maximize heat transfer
- ▶ Flex arm, non-obstructive rimless magnifying glass, 2.3 X main lens, 4.0 X inset lens. Allows continuous eye contact with object when moving into magnification area
- ▶ Limb restraints
- ▶ 4 Space Gels for continuous heat
- ▶ 2 Space Blankets to retain heat
- ▶ Non-skid feet for added stability
- ▶ Universal input power supply
- ▶ Size: 13.5"L x 9"W

MODEL	DESCRIPTION
ASS7T	Thermo Control Surgery Platform with Space Gels
SPGL-S	Space Gel Pad 4" x 6"
SPGL-M	Space Gel Pad 5.5" x 10"
SP-DR	Space Drape 3.5" x 10", (2 drapes per pack)
ASS7D	Thermo Control Surgery Platform with Deltaphase Pads
DPIP	Deltaphase Isothermal Pad 6" x 7.5"

See microscope section for digital microscope attachments.

Tail Vein Injection Platform

*The quickest and easiest restraint for tail vein injections.
Simply pull mouse tail through the slot and make injection!*

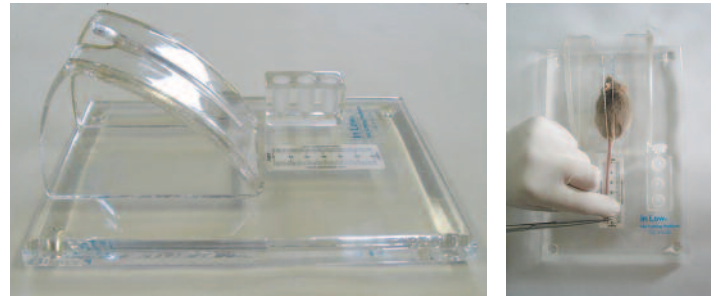


- ▶ Non-grip surface
- ▶ Wide opening for easy access
- ▶ Open slot for easy cleaning feces and urine easily washed away

MODEL	DESCRIPTION
IL-300	Tail Vein Injection Platform

Tail Snipping Platform

For isolating DNA from transgenic animals for genotyping

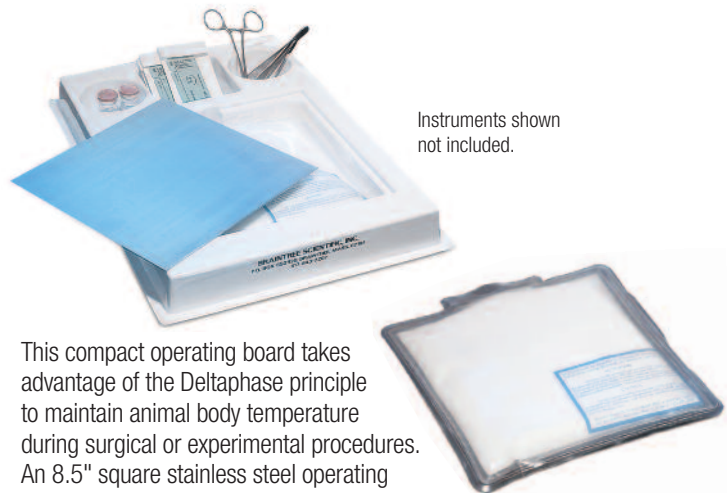


Simply pull mouse tail through the slot, measure and collect tip in the vial.

- ▶ **Micro Tube Holder:** Collect tail tip directly in the prelabeled tube preventing DNA cross contamination
- ▶ **Measuring Ruler (mm):** Accurately measure tail length for cutting. Enhances IACUC compliance
- ▶ **Cleaning Slot:** Feces and urine are easily washed out with stream of water (minimizes cross contamination)

MODEL	DESCRIPTION
IL-200	Tail Snipping Platform

Deltaphase® Operating Board



This compact operating board takes advantage of the Deltaphase principle to maintain animal body temperature during surgical or experimental procedures. An 8.5" square stainless steel operating surface lies in contact with an activated Deltaphase isothermal pad. The underside of the pad is insulated to provide a longer isothermal period. Molded wells are provided for sponges, instruments and anesthetic apparatus.

This board was designed by research scientists to be functional, durable, and easy to clean. Its low cost and safety make it appropriate for use in student laboratories. The unit is supplied with two Deltaphase pads. Each pad is 8" x 8" x 0.75"

MODEL	DESCRIPTION
390P	Operating Board, 2 Deltaphase Pads and 2 Insulators
39DP	Includes 3 Deltaphase Pads and 3 Insulators only (no board).
390M	Operating Board, 2 Deltaphase Pads and 2 Insulators with magnetic board



New! Mouse Transfer Tunnel



Enrichment and transfer tunnel, 130mm x 5mm dia. Tunnel handling is a proven method to reduce stress and anxiety when transferring a mouse. This polycarbonate tube can withstand the high temperatures of an autoclave and also maintain its shape.

MODEL	DESCRIPTION
TRANS-TUBE	Mouse Transfer Tunnel

DecapiCones®

The economical mouse and rodent restrainer



DC-200



MDC-200

Make injections and decapitation quicker and easier with Braintree Scientifics DecapiCones. Tapered plastic film tubes provide quick and easy restraint of rats, mice, and other small animals. I.P. injections can be made directly through the film! DecapiCones restrain post-decapitation kicking and prevent personal contact with feces or urine.

A unique dispenser holds DecapiCones open and ready for use. Simply hold

the DecapiCone in one hand and introduce the animal with the other. Animals enter readily, heading for the breathing hole at the small end. Roll and squeeze the large end closed.

May be used repeatedly for injections and simply discarded when soiled. For decapitation, hold at the rear and insert the small end into the decapitator.

MODEL	DESCRIPTION
MDC-200	For Mice 200 Decapicones (2 dispensers contain 100 cones each)
DC-200	For Rats 200 Decapicones (4 dispensers contain 50 cones each)
DCL-120	For Large Rats (500-800g) 120 Decapicones (4 dispensers contain 30 cones each)

Rotating Tail Injector

Reduce time and increase productivity on mice tail injections and tattooing!

The only mouse restrainer in which the tail can be rotated. This feature provides for easy access to either vein in the tail for an i.v. injection. Animal chamber accommodates mice weighing up to 45g. RTI is ideal to adequately restrain an unanesthetized animal while having the tail vein straight in line with user's eyes for a successful injection. A pattern of airholes provide ventilation as well as a "toe-hold" for the mice.

The unit sits comfortably on a bench top or in a laminar flow hood and it can be U.V. sterilized for use with immunocompromised mice. The raised table top lets user rest their hands to administer the injection.



MODEL	DESCRIPTION
RTI	Rotating Tail Injector (for mice up to 45g)
RTI-1	Standard Replacement Tube
RTI-2	Smaller Replacement Tube, ID 1.125"

Tailveiner®

Tail vein injection made easier!

The Tailveiner is the first easy-to-use mouse and rat restrainer specifically designed for tail vein injections. Slotted tube permits the rat or mouse to be quickly pulled in by the tail. The animal is then restrained by a plug which slides easily to accommodate any size rat or mouse, but locks automatically when handle is released. After dosing, the handle is lifted and the plug is easily removed. The Tailveiner is the fastest restrainer yet for intravenous injections in small animals.

Mouse size now includes free screw down noseplug option.



MODEL	DESCRIPTION
TV-150-STD	For Mice 1.25" ID Tube
TV-150-SM	For Mice 1.125" ID Tube
TV-150-LG	For Mice 1.5" ID Tube
RTV-170	For Rats up to 120g
RTV-180	For Rats up to 350g
RTV-190	For Rats up to 500g

Red Tube Tailveiner® Restrainer

- ▶ Laboratory rodents are largely color blind, so a red tube simply looks like a comforting shelter
- ▶ Red Tube is transparent, allowing investigator to observe animal inside for normal body position and breathing
- ▶ Improved comfort for rats and mice during acute experimental procedures without sacrificing safety or welfare



Tail vein injection made easier! Tailveiner® is the first easy-to-use mouse and rat restrainer specifically designed for tail vein injections. Slotted tube permits rat or mouse to be quickly pulled in by the tail. Animal is then restrained by a plug which slides easily to accommodate any size rat or mouse, but locks automatically when handle is released. After dosing, handle is lifted and plug is easily removed. Tailveiner is the fastest restrainer yet for intravenous injections in small animals. Includes a free stopper/plug option.

MODEL	DESCRIPTION
TV-RED-150STD	For Mice, 1.25" ID
RTV-R-170	Rats, up to 120gms, 1 3/4" ID
RTV-R-180	Rats, up to 350gms, 2 3/4" ID
RTV-R-190	Rats, up to 500gms, 3 1/4" ID

Red Short Base (Shorti) Tail Vein Injection Tube

- ▶ Laboratory rodents are largely color blind, so a red tube simply looks like a comforting shelter
- ▶ Red Tube is transparent, allowing investigator to observe animal inside for normal body position and breathing



Tail vein restraint system, mounted on a wider baseplate allowing tail to drop vertically for greater range of motion during venipuncture. Use when intending to mount tube above (e.g. on blocks) or at the edge of a work station/table.

MODEL	DESCRIPTION
SHORTI-STD	Mouse Tail Vein Injection Tube, 1.25" id, Red Tube



Rat Wrap

Fully adjustable, stress-free product for experimental procedures

Otago Systems Rat Wrap can be used to safely handle rats; 120g to 800g in size. Silicone-wrap design makes it fully adjustable. Wrap gently surrounds the rat in a stress-free snuggle. Rat cannot turn around making it safe for the operator. Unique features simplify performance of complete range of basic experimental procedures, such as tail vein injections and blood collection, tail tattoos, tail blood-pressure, subcutaneous injections and IP injections. Easily cleaned with alcohol between rats and is fully autoclavable.

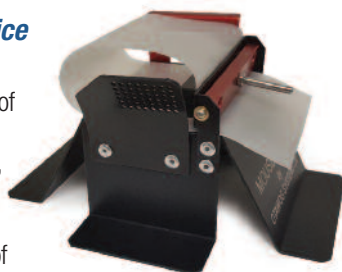


MODEL	DESCRIPTION
WRAP-R	Rat Wrap

Mouse Wrap

Fully adjustable, stress-free mice important for animal welfare

Otago Systems mouse wrap is made of stainless steel and silicone. Gently and safely holds mice for tail vein injections, blood sampling or tattoo identification. Tilting device allows for IP injections. Most importantly it adjusts to any size of mouse. Calm and comforting, wrapping whole mouse in a soft silicone snuggle. Mouse cannot turn around. Unit is easily cleaned and is fully autoclavable. Membrane is easily replaced.



MODEL	DESCRIPTION
WRAP-M	Mouse Wrap

Universal Restrainer

Experiments made easier

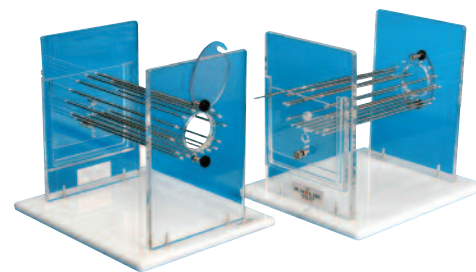
- ▶ **Adjustable:** Unique spiral grip makes single-size restrainers obsolete
- ▶ **Low stress:** Gentle, but secure. Rats can not turn or escape, natural posture maintained
- ▶ **Easy to use:** Complete experimental access
- ▶ **Stable and strong:** Wide base stands up to daily use, heavy construction
- ▶ **Easy to clean:** Opens fully, will not corrode, no blind ends. Plastic and stainless steel construction
- ▶ **Improved technique:** Save time and effort when handling laboratory rats. User has both hands free. Relax and avoid accidents, knowing animals are gently but firmly restrained



MODEL	DESCRIPTION
Mouse Restrainer (for mice 20-60g)	
500M-S	Smoked Canvas
500M-C	Clear Canvas
Rat Restrainer (for rats up to 350g)	
700R-S	Smoked Canvas
700R-C	Clear Canvas

Bowman Style Rodent Restrainer

The Bowman Style Rodent Restrainer has been re-engineered and refined to accommodate larger sized animals up to 750 grams. The positions of the stainless steel rods around the rodent provide easy access for many types of research applications, especially obesity studies.



Rodent can quickly be inserted into restrainer by removing several stainless steel upper rods, or through an access port hole in rear upright. Access port hole features a polycarbonate locking door to prevent escape.

Front "guillotine" style door can be adjusted and locked by using any one of three adjustment positions. The door has a stainless steel "spring loaded" lock. Suction cup feet on white plastic base secure the device during use.

- ▶ Weight range from 250 up to 750 grams
- ▶ Maximum length of the rodent compartment is 9" (228mm)
- ▶ Eighteen (18) stainless steel rods are adjustable up to 3.5" ϕ (89 mm)
- ▶ Rear access port opening is 2" ϕ (50.8 mm). Polycarbonate locking door is attached by a 'Nylock' fastener to prevent future operational loss.
- ▶ Overall height is 11" (279 mm)
- ▶ Base size is 10" x 12" (254 mm x 305 mm)
- ▶ Basic unit is constructed of 0.5" (12.7 mm) jeweled acrylic

MODEL	DESCRIPTION
POR-530	Bowman Style Rodent Restrainer

Dorsal Access Mouse Restrainer



Accurate, safe and fast way to give injections. The dorsal skin of the mouse is easily accessed through the top circular opening enabling the user to perform subcutaneous injections without risk of being bitten and less likelihood of user sticking own finger.

- ▶ Easy entry: draw mouse tail first or lead head first through the wide entry funnel into the back of the tube and then position stop gate in choice of two slots
- ▶ With tail first entry, tail is exposed at rear of tube allowing easy access for tattooing and tail bleeds
- ▶ Overall dimensions: 7.4cm L x 10cm W x 6.7cm H (6.8"L x 3.9"W x 2.6"H)
- ▶ For mice 18-35g
- ▶ Made from crystal-clear, durable, and chemical resistant TPX®
- ▶ Unlike acrylic, can be repeatedly disinfected with EtOH and is autoclave-safe

MODEL	DESCRIPTION
DA-MOUS	Dorsal Access Mouse Restrainer

Solid Brass Mouse Restrainer

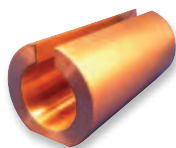
The Solid Brass Mouse Restrainer is designed to comfortably restrain a mouse for tail vein injections or sampling.

- ▶ Able to warm for animal comfort and vasodilatation of the tail
- ▶ Solid brass maintains heat for extended periods
- ▶ Weight provides a stable and secure placement on lab bench
- ▶ Can be sterilized via autoclave, ETO, liquid, VHP
- ▶ Long lasting

Specifications:

Size: 2" x 4"

Weight: 2 lbs



MODEL	DESCRIPTION
SAI-MBR	Solid Brass Mouse Restrainer

Economy Flat Bottomed Restrainers

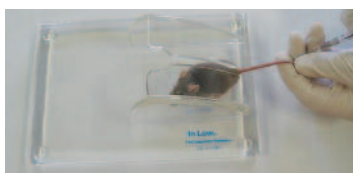
Individual semicylindrical plastic restrainers in small, medium and large. Each unit has an open slot on the bottom (for intra-peritoneal injections), a hole on the top (for the neck), and a slotted tail piece (for intravenous injections). Front slots provide ample ventilation.



MODEL	DESCRIPTION
FB-S	Small Mouse Restrainer (for mice 15 to 30g) 1.5" D x 4" (3.81cm D x 10.16cm)
FB-M	Medium Rat Restrainer (for rats 30 to 125g) 2" D x 5" (5.08cm D x 12.70cm)
FB-ML	Medium/Large Rat Restrainer (for rats 125 to 250g) 2.5" D x 6" (6.35cm D x 15.24cm)
FB-L	Large Rat Restrainer (for rats 250 to 500g) 3.25" D x 8" (8.25cm D x 20.32cm)

Tail Vein Injection Platform

- ▶ The quickest and easiest restraint for tail vein injections. Simply pull mouse tail through the slot and make injection!
- ▶ Non-grip surface
- ▶ Wide opening for easy access
- ▶ Open slot for easy cleaning feces and urine easily washed away



MODEL	DESCRIPTION
IL-300	Tail Vein Injection Platform

Tail Snipping Platform

For isolating DNA from transgenic animals for genotyping

Simply pull mouse tail through the slot, measure and collect tip in the vial.

- ▶ **Micro Tube Holder:** Collect tail tip directly in the prelabeled tube preventing DNA cross contamination
- ▶ **Measuring Ruler (mm):** Accurately measure tail length for cutting. Enhances IACUC compliance
- ▶ **Cleaning Slot:** Feces and urine are easily washed out with stream of water (minimizes cross contamination)



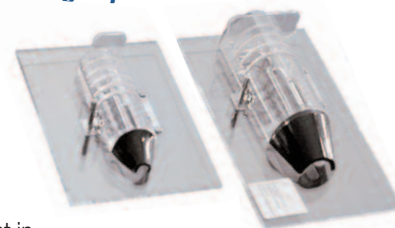
MODEL	DESCRIPTION
IL-200	Tail Snipping Platform

ECU™ Experimental Conditioning Unit

Conditions rats and mice for long experiments

ECU provides comfortable containment of experimental animals to facilitate repeated measurements of physiological and pharmacological parameters.

Not a restrainer: animals are preconditioned (trained) to accept appropriate periods of confinement in the ECU. Blood pressure, clearance, and metabolism studies are better and easier using ECUs.



ECU consists of a molded plexiglass canopy hinged to a plexiglass base. Canopy has a tapered opaque plastic hood to protect the animal from visual disturbances. Multiple slots and an end plate allow adjustment of the canopy length for animal size and easy access to dorsal catheters and electrical leads.

The base has a large through drilled slot for accessing ventral catheters, feces and urine. Four comfortable slots are provided to support the feet.

The Braintree Scientific ECU is set up in position with the required equipment. The animal is placed in the ECU and the catheters and leads connected to the appropriate devices.

For best results, animals should be conditioned to appropriate periods of confinement in the ECU. This is easily achieved by introducing animals to the ECU daily for increasing periods of time.

MODEL	DESCRIPTION
G-05	ECU less than 50g
G-1	ECU 50 to 120g
G-2	ECU 120 to 250g
G-3	ECU 250 to 350g
G-4	ECU 350 to 400g
G-5	ECU 400 to 800g

Illuminated Rodent Tail Vein Unit

Offers an "illuminated rodent tail vein" nit featuring "brite light" illumination system with rechargeable batteries and recharger unit.



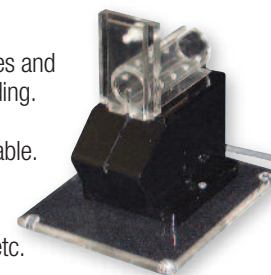
- ▶ Clear plastic tail insertion cone
- ▶ Formed white base housing batteries, on/off switch, and lights
- ▶ Base acts as battery charging unit
- ▶ Electrical plug for recharging batteries. (100 to 240 VAC capacity)

MODEL	DESCRIPTION
IRC-562	Illuminated Rodent Tail Vein Unit includes 2 rechargeable batteries

Mouse Tail Illuminator

The mouse tail illuminator efficiently illuminates and warms a mouse tail for easy injection or bleeding. Each unit comes with a restraining tube and illumination source. Additional tubes are available.

- ▶ Restraining tube slides off base for easy cleaning
- ▶ Illuminated slot for easy tail vein injection, etc.
- ▶ Sliding doors keep mouse gently restrained

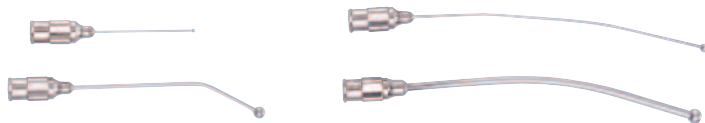


MODEL	DESCRIPTION
MTI	Mouse Tail Illuminator
MTI-1	Standard Replacement Tube
MTI-2	Smaller Tube 1.125"
MTI-3	Rotating Tube



Animal	Weight Range	Ball Diameter
Mice	25-150g	1.25mm
Rats	100-400g	2.25mm
Rats	350-500g	3.00mm
Other	over 450g	4.00mm

Reusable Feeding Needles



MODEL	GAUGE	LENGTH	BALL DIA./DZ*/PK*
N-001	24ga	1" Straight	1.25mm
N-002	22ga	1" Straight	1.25mm
N-003	20ga	3" Straight	2.25mm
N-004	18ga	3" Straight	2.25mm
N-005	20ga	3" Curved	2.25mm
N-006	18ga	3" Curved	2.25mm
N-007	16ga	3" Curved	3.00mm
N-008	18ga	1" Straight	2.25mm
N-009	16ga	4" Curved	3.00mm
N-010	20ga	1.5" Curved	2.25mm
N-020	22ga	1.5" Straight	1.25mm

*Items shipped by the dozen or 4 per pack.

Sterile Malleable Disposable Feeding Needles



These needles feature plastic luer hubs and silicone tips and can be easily formed to desired shape.

100 sterile needles per box.

MODEL	GAUGE	LENGTH
D-001	20G	1.5" Straight
D-002	18G	2" Straight
D-003	15G	3" Straight

Sterile Flexible Plastic (PTFE) Disposable Feeding Needles



Animal feeding needles (AFN) allow user to precisely dispense liquid to animal while minimizing the chances of esophogial piercing. Sterile, non-toxic, and non-pyrogenic, available in a variety of gauges and lengths.

100 sterile needles per box.

MODEL	GAUGE	LENGTH	BALL DIA.	QTY
DT-9928	18ga	1.5"	2.0mm	100
DT-9925	15ga	3.07"	2.8mm	100
DT-9920	20ga	1.5"	1.9mm	100

Additional sizes coming soon.

Flexible Plastic (PTFE) Disposable Feeding Needles with Bite Protectors

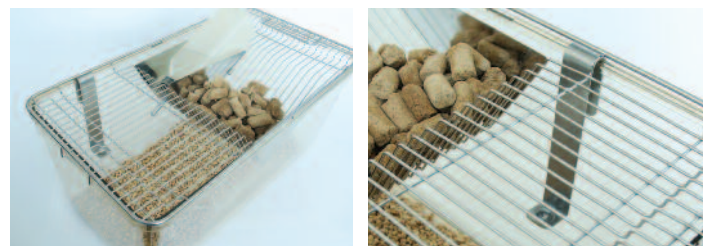
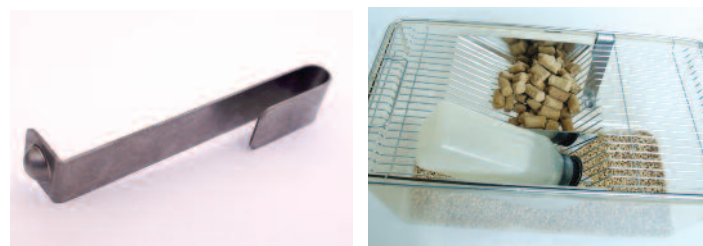


Flexible plastic (PTFE) tube is covered at hub end with 304 stainless steel tubing, protecting tubing from damage due to biting during use. Plastic (PTFE) tube is softer than other tubing types, very flexible and translucent for easy confirmation of reagent delivery. Plastic luer hubs and soft silicone tips, non-toxic and non-pyrogenic.

Packaged 5 needles per sterile peel pouch/20 pouches per box.

MODEL	GAUGE	LENGTH	BALL DIA.	QTY
BG-9928	18ga	1.5"	2.0mm	100
BG-9923	18ga	2"	2.0mm	100
BG-9924	18ga	3"	2.0mm	100
BG-9926	17ga	3.3"	2.4mm	100
BG-9925	15ga	3.1"	2.8mm	100
BG-9927	15ga	3.9"	2.8mm	100

Rodent Feeder Bar



- ▶ Administer easily! No special skills required and completely eliminates need for dangerous gavage procedure
- ▶ Reduce time! Administer dose to 10-15 animals in 5-10 minutes
- ▶ Mix drugs directly to any available food matrix (peanut butter, yogurt, cheese)
- ▶ Confirm visually drug uptake by animals
- ▶ Work effortlessly with small or large groups of animals
- ▶ Animals adapt to a feeder bar fast and effortlessly
- ▶ Works for all rodents

MODEL	DESCRIPTION
FD-BAR	Rodent Feeder Bar



Shop online at www.BraintreeSci.com



Mini Capsules

For laboratory mice, rats and guinea pigs



- Ideal for materials that are insoluble, form poor suspensions, are affected by excipients or are odorous and distasteful, e.g., sustained release beadlets, paint flakes, chromic oxide marker
- For lower GI drug delivery size 9 has been used in rats >200gm and Guinea Pigs; size M has been used in mice >30gm. Capsule holders are available for dip coating in enteric solutions
- Size 9 can be used for intra-colonic delivery via rectal insertion in rats >200-250gm
- Save time and money by eliminating validation of suspension/solution homogeneity
- Eliminate excipients absorption affects

PARAMETER	SIZE 9EL	SIZE 9	SIZE M
Capsule body capacity	0.08ml	0.025ml	0.004ml
Fill weight (materials with density 1g/ml)	80mg	25mg	4mg
External Diameter Maximum	2.70mm	2.70mm	1.27mm
Length when locked maximum	23.2mm	8.4mm	8.4mm
Surface area locked capsule in sq mm, for enteric coating.	not applicable	68 ± 3 sq mm	31 ± 3 sq mm
Weight empty (cap and body) average ¹	17mg	10mg	~2mg
Colors available	clear and opaque	clear and opaque	white

¹For a specific net fill weight tare the weight of each capsule body individually and then fill or use a pre-weighed amount of powder for each capsule.

Capsule Kit: Includes capsules, funnel, stand, tamper, dosing device and instructional video. Size 9 and 9el kits include 100 capsules. Size M kits include 50 capsules.

For easier dosing, we recommend the following aids:

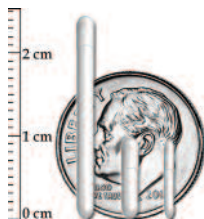
Stainless Steel Dosing Syringe:

If dosing multiple animals, order additional syringes to allow them to dry between administrations. Syringes have a Luer lock design.

Stainless Steel Filling Funnel: Includes funnel, tamper, and stand. For precision filling on a balance.

Multiple Capsule Filler: Fill 40 capsules at a time to within ± 7-10% of average weight. Includes filler, tamper, and spreader.

Holder: Holds six capsules for enteric coating. Not for use with 9el as it will not pass through to the lower intestine.



MODEL	DESCRIPTION	SIZE	QTY
X-KIT-9el	Rat Capsule Kit	9el	100 capsules
X-KIT-9	Rat Capsule Kit	9	100 capsules
X-KIT-M	Mouse Capsule Kit	M	50 capsules
A-CT-9el	Capsules	9el	100/container
A-CT-9	Capsules	9	100/container
A-CT-M	Capsules	M	50/container
X-SYR-9el	Stainless Steel Dosing Syringe	9el	each
X-SYR-9	Stainless Steel Dosing Syringe	9	each
X-SYR-M	Stainless Steel Dosing Syringe	M	each
X-FUN-9el	Stainless Steel Filling Funnel	9el	each
X-FUN-9	Stainless Steel Filling Funnel	9	each
X-FUN-M	Stainless Steel Filling Funnel	M	each
X-FILL-9el	Multiple Capsule Filler	9el	each
X-FILL-9	Multiple Capsule Filler	9	each
X-HOLD-9	Holder	9	each
X-HOLD-M	Holder	M	each

Dyets Powder Feeder Jar Setup



- Prevents tipping or moving of Dyets feeding jar
- 100% stainless steel for easy cleaning and durability
- Versatile design allows for placement in any cage corner
- Set contains jar, lid, follower, and holder

MODEL	DESCRIPTION
DYETS-SETUP	Feed Jar Holder - 4 oz. and Complete Jar Set
DYETS-JAR	Feeding Jar - 4 oz. Clear Glass Jar, dia. 3" x 2"H
DYETS-FOL	Food Follower - 4 oz. Stainless Steel, 6 holes 1 1/8" dia.
DYETS-LID	Deluxe Lid - 4 oz. Stainless Steel Snap-on Hole, dia. 1"

Water Bottles

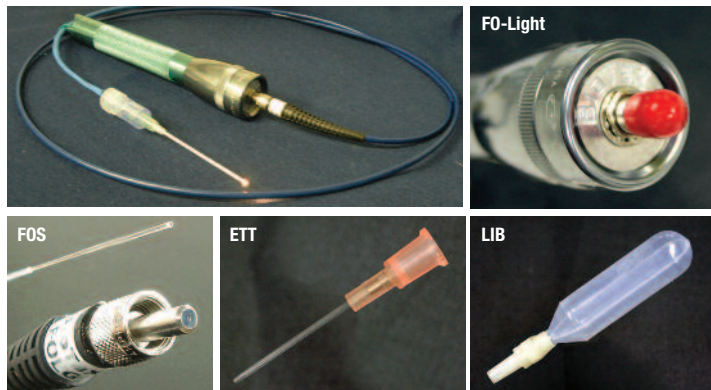


100 ml glass bottles are graduated by 1ml and include a 2.5" straight drinking tube and stopper.

MODEL	DESCRIPTION
WTBR-S-BL	Water Bottle with 2.5 straight sipper tube, ball and stopper
WTBR-S-NB	Water Bottle with 2.5 straight open sipper tube and stopper



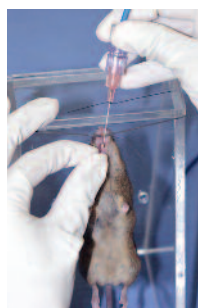
BioLITE Intubation Illumination System



The BioLITE system provides better anatomical visualization and combines several tools into one reducing the intubation time making the intubation process fast and easy.

The BioLITE System consists of a family of products: fiber optic illuminator (FO-Light), fiber optic stylets (FOS), endotracheal tubes (ETT), and lung inflation bulbs (LIB) packaged in a variety of kits to meet the individual needs for a variety of research interests.

Unlike other flashlight based fiber optic illuminators, the FO-Light houses an optical system that provides highly efficient light coupling into small core fiber optics resulting in intense illumination. Without the optical system, intensity of light output is insufficient to visualize anatomical features, which is why other flashlight based fiber optic illuminators are not compatible with small core fiber optics.



Using a small core fiber optic as both the stylet and guide wire, the FOS provides enough rigidity for applying mechanical force while remaining flexible enough to traverse convoluted paths. Light can also be delivered through the stylet/guide wire, enabling the user to illuminate the discrete places in the oropharynx directly where needed.

As accessories to the illuminator and stylets, endotracheal tubes and lung inflation bulbs have specific qualities and provide feedback making them

essential to any intubation procedure. The endotracheal tubes are urethane based IV catheters that are softer and more flexible than PTFE based catheters, minimizing the trauma associated with intubation. Lung inflation bulbs provide a means for verifying correct intubation through direct visualization of chest distention, which is more reliable than observing mirror fogging or abdominal breathing.

Also available as a Complete Kit (CO-Kit) that includes all the BioLITE System products for mouse and both sizes of rat. The BioLITE System is available in the following kits:

- ▶ Large Rat Kit (200+ grams, LR-Kit)
- ▶ Small Rat Kit (less than 200 grams, SR-Kit)
- ▶ Mouse Kit (10+ grams, MI-Kit)

Each kit contains all the necessary equipment to perform small rodent intubations fast, easy, and relatively painlessly.

- ▶ Fiber optic illuminator (FO-Light)
- ▶ Appropriate size fiber optic stylet (FOS-xxx)
- ▶ 5-pack of the appropriate size endotracheal tubes (ETT-xx-05)
- ▶ 3-pack of lung inflation bulbs (LIB-03)

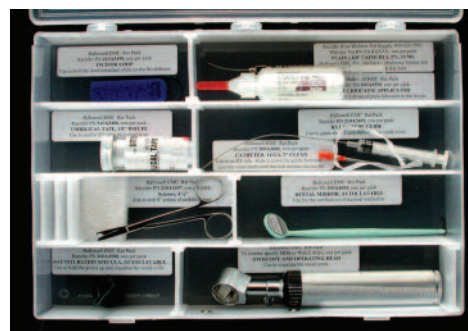
Though the BioLITE System was initially created for intubation, it remains a highly efficient small core fiber optic illumination system and can essentially be used in any application that requires intense illumination of a small space in a tortuous location.

For those interested in alternate applications or have no need for the intubation accessories, we offer a Stylets Kit (FO-Kit) that includes a mouse fiber optic stylet (FOS-400, 400µm core diameter), a small rat fiber optic stylet (FOS-600), a big rat fiber optic stylet (FOS-800), and a fiber optic illuminator (FO-Light).

MODEL	DESCRIPTION
MI-Kit	Mouse Kit for Mice 10+ grams (includes 1 FOS-400, 1 FO-Light, 1 LIB-03, and 1 ETT-20-05)
SR-Kit	Small Rat Kit for Rats 100-200 grams (includes 1 FOS-600, 1 FO-Light, 1 LIB-03, and 1 ETT-16-05)
LR-Kit	Large Rat Kit for Rats 200+ grams (includes 1 FOS-800, 1 FO-Light, 1 LIB-03, and 1 ETT-16-05)
FOS-Kit	Stylets Kit (includes 1 FOS-400, 1 FOS-600, 1 FOS-800, and 1 FO-Light)
CO-Kit	Complete Kit (includes 1 FO-Kit, 1 LIB-03, 1 ETT-16-05, and 1 ETT-20-05)

Replacement parts available online at BraintreeSci.com

Intubation Packs



For use in conjunction with the Rodent WorkStand. The intubation packs, a rat pack and a mouse pack, hold everything needed to directly visualize and quickly intubate with a minimum amount of trauma. Each pack is

designed to hold all tools and supplies needed to perform quick, efficient and minimally traumatic orotracheal intubation of small rodents.

Intubation packs include specially designed and molded, autoclavable intubation speculum, lidocaine applicator, endotracheal tube guide wire, incisor loop and a brief video tutorial of how to perform intubations. Rat Pack also contains scissors, umbilical tape, and mirror for the verification of tracheal intubation. Mouse pack includes two sizes of Hallowell's mouse endotracheal tubes.

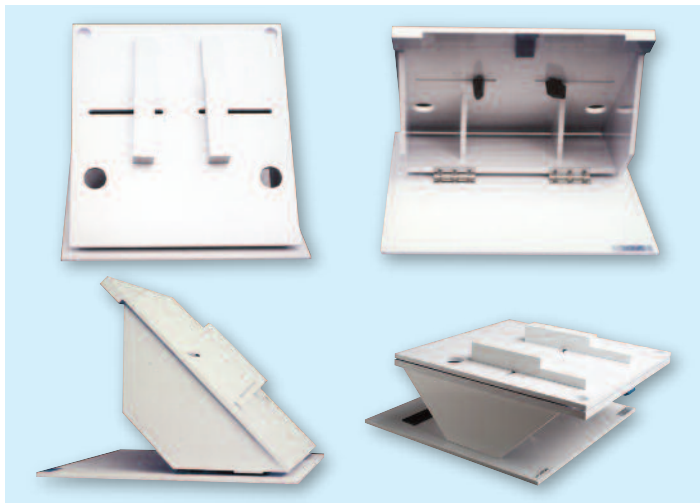
Packaged neatly and conveniently in a 13" x 8" x 2" polypropylene organizer box with each compartment labeled for contents and reordering information. Can be stored most anywhere and always ready for use.

MODEL	DESCRIPTION
RW-A3746	Rat Intubation Pack
RW-A3747	Mouse Intubation Pack
RW-A3748	MDS Otoscope - not rechargeable Uses standard, replaceable NICAD batteries.
RW-A3749	Welch Allyn NICAD Otoscope - rechargeable Includes charger
RW-A3754	Welch Allyn LI ION Otoscope lighter and brighter- rechargeable Includes charger

Replacement parts available online at BraintreeSci.com



Rodent Work Stand



Rodent Work Stand is designed to support rats, mice and similar small rodents in a stable and comfortable position for the technician during endotracheal intubation and intratracheal dose instillation and other similar procedures. 12" wide x 14" deep x 5.375" high when flat, tilted it is 9.5" high. (Flat: 30.48cm x 35.56cm x 13.65cm, tilted: 24.13cm high)

Heated work stand kit converts this work stand to a heated work stand.

MODEL	DESCRIPTION
RW-A3467	Rodent Work Stand
RW-HHP	Heated Pad Kit

BioLITE Stand

Simple durable stand is easy to clean, store, and is portable



Constructed from durable polycarbonate, this platform provides the perfect stage for intubating mice and rats of all sizes.

The animal is suspended from the incisor wire on the angled side of the stand. Three mounting positions are available to customize the placement of the animal on the stand in order to meet the user's needs. Two sets of posts are provided with each stand. Each post has three positions for the height adjustment to optimally accommodate user and animal.

Stand is constructed from a single piece of polycarbonate plastic with a seamless design. The top of the stand provides a hand rest for stabilization during intubation that is designed to support significant weight. Compact seamless design and its construction make this stand easy to clean. Will not crack with the use of harsh cleaning agents as with similar stands constructed from acrylic.

MODEL	DESCRIPTION
RIS-100	For Mice
RIS-200	For Rats



Irradiation

Rad Disk Micro3

Rad Disk Micro3
Weanling/Petri



Stainless steel
holder for
Rad Disk Micro3
(sold separately)



Rad Disk Micro3 Weanling/Petri is triple divided for irradiation of weanling sized mice. Also can be used without divider and jump guard system for two adult mice. Four cages fit stacked in stainless steel holder. Without divider system it can also be used as a petri dish application for growth and irradiation of cells/bacteria. Absolute filter lid permits higher air exchange than standard petri. Bacteria or cells requiring greater availability of oxygen or other gaseous mixture, can benefit from lack of pressure buildup within dish, and full, uninterrupted access and exchange of supplied gas or ambient air.

Three Rad Disk Micro3 or four Rad Disk Micro3 Weanling/Petri stacked versions available.

Steam autoclavable, medical grade polycarbonate construction mitigates attenuation of gamma source and allows germ-free rodent transport from cage to Gammacell® and return, using micro-isolation techniques. Modified stainless steel canister.

Specifications:

Rad Disk Micro3

Height assembled: 2.5"

Diameter assembled: 4.75"

Height with 3 units stacked: 7.5"

Material: Polycarbonate medical grade, nylon fasteners and screen, and absolute filtration filter media

Rad Disk Micro3 Weanling/Petri

Height assembled: 1.88"

Diameter assembled: 4.75"

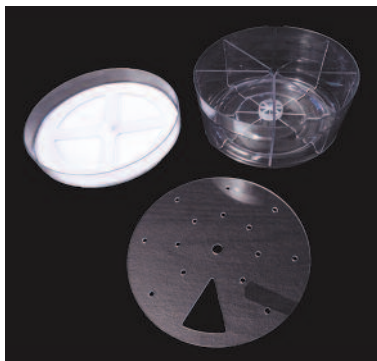
Height with 4 units stacked: 7.5"

Material: Polycarbonate medical grade, nylon fasteners and screen, and absolute filtration filter media

MODEL	DESCRIPTION
IRD-P-M3	Rad Disk Micro3, each
IRD-P-M3W	Rad Disk Micro3 Weanling/Petri, each
IRD-FLT-M3	Replacement Filter
IRD-SSH	Stainless Steel Holder for Micro3 Weanling/Petri



Rad Disk™ and Rad Disk Mini™ Polycarbonate Rodent Microisolation Irradiator Cages



Protection for Irradiated

Animals: Because Rad Disk™ and Rad Disk Mini™ are made entirely of polycarbonate plastic, it is autoclavable. The two cage sizes are designed to fit into radiation chambers 5" high and 9" diameter and larger. Used as instructed, Rad Disk™ and Rad Disk Mini™ prevent contamination of mice before, during and after irradiation.

They are also a versatile carrier to protect rodents while transporting them in and out of facilities.

Cage Divider System: Rad Disk and Rad Disk Mini include a polycarbonate removable divider system which divides cages into four to eight compartments for irradiation. Used without dividers, mice can also free range which allows greater uniformity of dose delivery during irradiation.

Imbedded Jump Guard™: Rad Disk and Rad Disk Mini include a polycarbonate piehole cutout cover that can be easily rotated over each divided chamber to insert rodents and prevent escape or jump to adjacent chambers.

Protection from Contamination: Rad Disk and Rad Disk Mini are autoclavable with lid in place. Within a changing hood, animals are transferred from their housing into sterile protective environment of Rad Disk and Rad Disk Mini, using standard microisolation techniques. Lid contains a 3-ply filter which can be used up to 6 months, or 12 autoclave cycles. Lid has aligned air holes through which potential airborne contaminants are trapped on exterior of filter. After transferring animals into Rad Disk and Rad Disk Mini, animals can be transported to the radiation source, even if traveling through a contaminated environment.

Sterile Transportation: After irradiation at location outside of the animal facility, Rad Disk and Rad Disk Mini containing animals are prepared for re-entry into animal facility by placing a strip of plastic tape over each aligned row of airholes, completely sealing lid and allowing for liquid sterilization of exterior of cage prior to facility re-entry (check with facility management for SOP which may vary from institution to institution). Once decontaminated, taped cage can be taken to the sterile or clean change station, and animals may then be transferred back to their original or new cages. Tape can be removed from lid after transporting cage to wash area for reprocessing. Any contaminants are trapped on outside of filter between airholes and lid, so leaving tape in place prevents exposure to facility environment.

Rad Disk and Rad Disk Mini are easy to clean, store, and sterilize for use.

MODEL	DESCRIPTION
IRD-P-M	Mouse Irradiator Cage with Divider (polycarbonate) 8.875" D x 3.875"H (22.5cm D x 9.8cm H)
IRD-P-R	Rat Irradiator Cage with Divider (polycarbonate) 10.75" D x 4"H (27.3cm D x 10.2cm H)
IRD-FLT-M	Mouse Irradiator Cage Replacement Filter
IRD-FLT-R	Rat Irradiator Cage Replacement Filter

Rat and Mouse Pie Cages

Cages are easy to clean and to use



Circular cages hold up to 11 rodents for whole body irradiation. Notched removable lid can be dialed to any of the ventilated pie-shaped chambers. Also use for temporary transport or storage of animals for acute studies. The rat cages have tail slots for intravenous dosing.

MODEL	DESCRIPTION
MPC-1	Mouse Pie Cage: Unit dimensions: 8.5"D x 3"H (21.5cm D x 7.5cm H) Individual chambers feature 5cm base and 9cm length
MPC-2	Mouse Pie Cage with filter top and filter
MPC-FLT	Replacement Filter
RPC-1	Small Rat Pie Cage Unit dimensions: 16"D x 2.7"H (41cm D x 6.75cm H) Individual chambers: 10cm (base), 18cm (length)
RPC-2	Large Rat Pie Cage Unit dimensions: 18"D x 3"H (46cm D x 8cm H) Individual chambers: 11.5cm (base), 20cm (length)

Mouse Irradiation Chamber

- ▶ 1/8" (3.2mm) clear acrylic
- ▶ Flip-top lid for easy loading and unloading
- ▶ Perforated top allows air to circulate throughout unit
- ▶ Top incorporates a slot for filter material to improve contamination control
- ▶ Non-skid feet prevent unit from slipping and sliding



MODEL	DESCRIPTION
AK-MIC	Mouse Irradiation Chamber 6" D x 2" H (15.24cm D x 5.08cm H)

Shop online at www.BraintreeSci.com





Mouse Fixtures and Shields

Partial Body Irradiation Fixtures and Shields

Standard holding fixtures and corresponding lead shield for mice. Can be purchased separately or as a set.

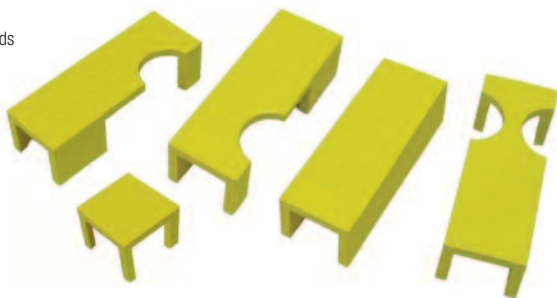
Fixtures



Universal Shields
MHS



MHS1/MHS2 Shields



MODEL	CONFIGURATION
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Fixture Body Dia. 1" (25mm) <25g Mice

MHS1-F-LF	Left Flank Exposure
MHS1-F-RF	Right Flank Exposure
MHS1-F-DF	Dual Flank Exposure
MHS1-F-NF	No Flank

Fixture Body Dia. 1.375" (35mm)

MHS2-F-LF	Left Flank Exposure
MHS2-F-RF	Right Flank Exposure
MHS2-F-DF	Dual Flank Exposure
MHS2-F-NF	No Flank

Universal Shield Fits both 1" and 1.375" Fixtures

MHS-LF	Left Flank Exposure
MHS-RF	Right Flank Exposure
MHS-DF	Dual Flank Exposure
MHS-NF	No Flank
MHS-B	Head or Belly Irradiation Shield

Size 1 (<25G Mice) Shield Body Diameter is 1" (25mm)

MHS1-S-LF	Left Flank Shield
MHS1-S-RF	Right Flank Shield
MHS1-S-DF	Dual Flank Shield
MHS1-S-NF	No Flank Shield
MHS1-S-B	Belly Shield

Size 2 Shield Body Diameter is 1.375" (35mm)

MHS2-S-LF	Left Flank Shield
MHS2-S-RF	Right Flank Shield
MHS2-S-DF	Dual Flank Shield
MHS2-S-NF	No Flank Shield
MHS2-S-B	Belly Shield



Split Shield and Bite Guard Restrainer

MODEL	CONFIGURATION
MHS2-HE-BBR	Head Exposure, Restrainer with Bite Block, 1.375" body dia.
MHS2-HE-SPS	Head Exposure, Split Shield only, body 1.375" dia.
MHS2-HE-SET	Head Exposure, Split Shield and Bite Block Set, body 1.375" dia.



Quad Head Exposure

MODEL	CONFIGURATION
MHS1-HQ-BPS	>25g, Quad Base Plate and Shield
MHS1-HQ-SET	>25g, Quad Base Plate, Shield, 4 Restraints
MHS2-HQ-BPS	1.375" body dia., Quad Base Plate and Shield
MHS2-HQ-SET	1.375" body dia., Quad Base Plate, Shield, 4 Restraints

Mouse Phantoms

Provides standard of reference for Micro-CT scanners

- ▶ 25 mg/cc - 750 mg/cc HA targets
- ▶ Lung, muscle and adipose
- ▶ Optimal for Micro-CT
- ▶ Solid or liquid filled



For precise, accurate and high-resolution measurements. Field of view of these systems requires appropriately scaled QA phantoms. CIRS Model 090 MicroMouse™ and Model 091 Water-Filled Mouse Phantoms provide tools for quantifying calcium and bone density with respect to X-ray attenuation and absorption properties. CIRS blends hydroxyapatite (HA) in a soft-tissue equivalent, polymer background to provide references which can range in HA loading between 0 mg/cc and 750 mg/cc. Hydroxyapatite grain size and homogeneity of rods are optimized for use in Micro-CT.

Solid MicroMouse Phantom and Water-Filled Mouse Phantom contain 11 rods of varying mineral loading and dimension. MicroMouse Phantom rods are embedded in soft tissue equivalent epoxy material the size and shape of a small rodent.

Water-Filled Mouse Phantom contains 11 rods in a durable, water-tight, polycarbonate housing, resistant to many chemicals. Model 091 housing can easily be filled with a variety of liquids to vary contrast between rods and surrounding liquid. Eleven Micro-CT rods used in Model 090 and 091 are also available to purchase separately as Model 092, along with other length, diameter, and HA loading options. Send email for information regarding MPT-092.

MODEL	DESCRIPTION
MPT-090	MicroMouse Phantom for Micro CT
MPT-091	Water-filled Mouse Phantom for Micro CT



Canister Humidifier



Modified Mouse Pie Cage
sold separately

Allows approximately 2-3 hours of oxygen therapy and should be filled with distilled water.

Includes:

- ▶ Plastic collar
- ▶ White nipple connector with cap
- ▶ 7' crush proof O₂ tubing to canister
- ▶ Chrome DISS at top of canister
- ▶ 7' crush proof O₂ tubing from canister to O₂ source

MODEL	DESCRIPTION
HUM-CAN	Canister Humidifier

Canister Nebulizer



Modified Mouse Pie Cage
sold separately

Canister nebulizer with a dial on the top. Allows approximately 2 hours of therapy. Nebulization does not require oxygen (compressed air is sufficient). Use of distilled water is suggested rather than risk particulate from tap water.

Includes:

- ▶ Blue hose
- ▶ Canister nebulizer
- ▶ Chrome DISS fitting at top of canister
- ▶ 7' crush proof O₂ tubing from chrome fitting to air compressor and Schuco air compressor

MODEL	DESCRIPTION
NEB-CAN	Canister Nebulizer

9cc Medication Nebulizer

Pour in whatever dosage of liquid medicine, top off with distilled water. Approximately 20-30 minute treatment. Nebulization does not require oxygen.

Includes:

- ▶ Hospital grade Schuco air compressor
- ▶ Blue top medication nebulizer
- ▶ Plastic collar
- ▶ 7' crush proof O₂ tubing to air compressor
- ▶ White elbow hose connector

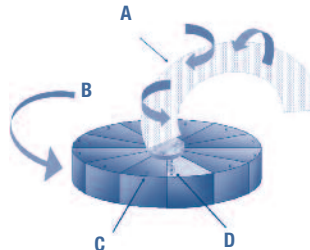


Modified Mouse Pie Cage sold separately

MODEL	DESCRIPTION
NEB-MED	9cc Medication Nebulizer

Modified Pie Cage to accept aerosol delivery

- A. Aerosol enters the PIE via tubing attached to the central core. Core is open on the top and solid on the bottom
- B. PIE rotates so mice can be placed in individual sections
- C. Aerosol exits each PIE section through one 3mm hole in the center of the outer edge
- D. Aerosol is distributed to each PIE section via five 3mm holes



MODEL	DESCRIPTION
MPC-AERO	Mouse Aerosol Cage
RPC-1-AERO	Small Rat Aerosol Cage, 41cm D x 6.75cm H
RPC-2-AERO	Large Rat Aerosol Cage, 46cm D x 8cm H

Thermocare® Intensive Care Units

The Thermocare water-jacketed warmer base is made of heavy gauge fire retardant plastic. The UL and CSA approved heater maintains the temperature of the water accurately through resistance heating controlled thermostatically with a direct water-contact sensor. Creates a natural thermal convection current within the walls of the unit and the heat is radiated to ensure a constant, sustainable temperature within a safe therapeutic range of 75°-100°F wherever the patient lies. This combination of radiant heat and convection currents preclude the use of a pump, fan, or motor which may spark and ignite with the use of oxygen.

Uniform temperature is achieved without "hot spots" and "safe heat" is assured because the animal is surrounded by comforting warmth, just like a "hot water bottle", making Thermocare Warmers a critical part of recovery for reptiles, rodents and animals. Vents on the top of the heated or unheated covered units allow warm air to rise and escape with any carbon dioxide build up. It is the combination of therapeutic heat with respiratory therapy that creates a stand-alone ICU (Intensive Care Unit). For example, with the addition of a cover (domed or flat — which allows respiratory therapy) the Thermocare Warmer becomes an ICU.

To meet your specific needs, ThermoCare® offers a wide selection of intensive care units:

Intensive Care Unit with Dome Cover

ThermoCare's Intensive Care Units (ICUs) allow a full latitude of respiratory therapeutic procedures, including administering oxygen, humidity and nebulization in combination with heat. Units accommodate animals up to 20 pounds (small size) or up to 80 pounds (medium/large sizes). The optional perch facilitates treatment for birds.

Specifications:

Small: 26"L x 17"W x 15"H

Medium: 33"L x 27"W x 25"H

Large: 42"L x 27"W x 25"H

Dome covered units include:

Water conditioner, water level gauge, spin/venting handport covers, humidiguide (temperature/humidity gauges)



MODEL	DESCRIPTION	SIZE
DW-1N	ICU with Dome Cover	Small
DW-2N	ICU with Dome Cover	Medium
DW-3N	ICU with Dome Cover	Large

Intensive Care Unit with Flat Cover

This Intensive Care Unit (ICU) has been named by researchers as the "rodent recovery cage," also great for small birds, reptiles, eggs, and newborns.

Specifications:

Small: 26"L x 17"W x 6.5"H

Medium: 33"L x 27"W x 12"H

Large: 42"L x 27"W x 12"H

Flat covered warmers include:

Water conditioner, Digital thermostat, Water level gauge to monitor water level within the warmer, Spin/venting handport covers, humidiguide (temperature/humidity gauges), Divider



MODEL	DESCRIPTION	SIZE
FW-1N	ICU with Flat Cover	Small
FW-2N	ICU with Flat Cover	Medium
FW-3N	ICU with Flat Cover	Large



Emergency preparedness with disposable cages

All Innovive cages are BPA-FREE



Both equipment failure and a natural disaster can be dealt with efficiently and safely using the Innovive disposable irradiated Innocage® Static rodent cages and pre-filled Aquavive® water bottles.

The Innovive disposable rodent caging disaster recovery and emergency planning solution allows user to:

- ▶ Maintain animals' change-out schedule with a supply of fresh irradiated static cages on schedule
- ▶ Provide a clean water supply to mice with pre-filled water bottles quickly and easily in any location
- ▶ Quickly evacuate IVC racks to a new lab location

Maximize storage space: Innovive disposable rodent cages and water pack densely; they arrive double-bagged, irradiated and boxed for easy storage and can be accessed as needed.

Static Disposable Cages



All Innovive static mouse cage lids fit the universal cage bottom, which provides 81" of floor space and 5" of headroom. All Innovive static mouse cage lids are delivered double-bagged and irradiated - 100 units per box. Innovive static rodent cages are designed for stand-alone use, no ventilated rack required.

Innocage® Static Mouse

Specifications:

Dimensions: 14.7"D x 9.2"W x 5.5"H

Uses: Universal

Cage size: 8.8 oz

Capacity: 1.9 oz food tray

- ▶ **Static Lid:** Innovive disposable static cage is designed specifically for static rodent housing for mice; it is also an excellent resource for your Emergency Preparedness Plan
- ▶ **Water:** Aquavive Mouse bottle (empty or pre-filled), autowatering, and water pouches
- ▶ **Food Tray:** Standard, stainless steel or all plastic

Disposable Cages for Rodent Transportation

The Innovive disposable transportation cage allows transportation of mice in the same cage that they are housed with a simple change of the lid, reducing animals' disturbance with a simple change of the lid.

Rodent Transportation Challenges

- ▶ Maintaining a low-stress and healthy environment for animals during long- and short-haul transportation
- ▶ Discrete and secure rodent caging
- ▶ Cost-effective transportation solution

Advantages of Innovive Transportation

- ▶ Healthy air for the trip of any length: large top filters provide excellent intracage airflow, which allows 5 mice to be housed in the Innocage up to 7 days
- ▶ Secure transport cage for mice: the cage's snap top secures animals during the trip
- ▶ No water or food tray needed: simply add a gel pouch and animals are ready to go
- ▶ Disposable caging is a cost-effective solution: remove the need to track, return and/or replace expensive traditional rodent cages

Innocage® Transport Mouse

Transport Lid - Whether moving animals a short or long distance, the Innocage Transport is a great solution. Simply replace an IVC lid with a transport lid to prepare the animals for relocation. Maintain a complete stock of transport cages for distributing animals from a breeding operation to primary housing areas.



Accessories



Mouse Water Bottle



Mouse Feeder



Card Holder

MODEL	DESCRIPTION	QTY
MS2	Innocage Static Mouse (top and bottom)	100
MS2-C8	Innocage Static Mouse, pre-bedded 0.125" Corn Cob (set) . . .	100
MS2-AD	Innocage Static Mouse, pre-bedded Alpha Dri (set)	100
MS4	Innocage Transport Mouse (top and bottom)	100
MS4-C8	Innocage Transport Mouse, pre-bedded 0.125" Corn Cob (set) .	100
MS4-AD	Innocage Transport Mouse, pre-bedded Alpha Dri (set)	100
M-BTM	Innocage Mouse, bottom only	100
M-BTM-C8	Innocage Mouse, bottom only, pre-bedded 0.125" Corn Cob . .	100
M-BTM-AD	Innocage Mouse, bottom only, pre-bedded Alpha Dri	100
M-FEED	Mouse Feeder, extended-use (standard)	100
M-FEED-SS	Mouse Feeder, extended-use (stainless steel)	100
M-FEED-P	Mouse Feeder, extended-use (plastic)	100
M-WB-300	Aquavive Mouse Water Bottle empty	200
CRD-HLD-U	Card Holder	100



Deltaphase® Isothermal Pad

**Maintains animals or cultures at 37°C for hours.
Ideal for NMR!**



Based on fundamental thermodynamics, completely safe even with flammable gases. Uses no electricity, wires, or control box. Reusable.

Why you need them

Normal biochemical functions are based on the temperature of 37°C. In conscious animals, core temperature is maintained. During anesthesia, body temperature falls. Normal chemistry is disturbed, surgical tolerance is reduced, and recovery is slow.

Studies of mammalian cell biology are conducted at 37°C. in expensive incubators in order to maintain normal function. However, the manipulation of cultures in a clean hood or on the bench top almost always leads to significant cooling. At the least, this results in the displacement of growth curves. At worst it can lead to significant cell mortality.

To maintain temperature during experimental procedures, many methods are used. Coverings help, but are impractical during most procedures and cannot replace heat already lost. Electrical heaters must be carefully monitored to prevent overheating or oscillation. Electrical devices often interfere with recording equipment. They are a shock hazard in the presence of urine, blood, or culture media, and the spark of a thermostat might ignite a flammable anesthetic or solvent.

The Deltaphase Isothermal Pad is a unique approach to temperature stabilization. It is a source of heat which cannot overheat once it enters its phase change. It is economical in that it needs no tubes, wires or electricity. It is also safer than other devices because it needs no thermostat or controller and does not generate electrical signals. But it can maintain a small animal or a culture bottle at near normal and constant temperature for several hours.

The concept of the Deltaphase Isothermal Pad is derived from the basic thermodynamic principle that a phase change occurs at constant temperature.

A unique chemical solution, contained within a durable pouch, is in solid form at room temperature. When heated, the solution becomes fluid and the pad is ready to use.

When an animal or container is placed in contact with an activated pad, heat is transferred and the solution slowly undergoes a phase change. During this change, over 30 calories are available per gram of solution and the temperature remains constant. The pad remains isothermal until all of the liquid phase has solidified.

Experimental studies have shown that the pad temperature of 39°C is ideal for maintaining animal or cultures at 37°C. If desired, one or more pads may be placed within a foam box to create a bench top or portable incubator.

Laboratory Evaluation

Rectal temperatures of two rats during six-hour experiment. (Animal weights 350g room temperature 24.5°C.) Animal on Deltaphase Isothermal Pad maintained near normal temperature for more than three hours.

The Deltaphase Isothermal Pad has been evaluated by researchers at a major medical center. Anesthetized rats (pentobarbital 45mg/kg) were placed on either an operating table or a Deltaphase Pad, and rectal temperature was monitored for six hours. The temperature of the rats on the conventional table fell rapidly and stabilized only near 30°C when pronounced shivering began. The rats on Deltaphase Isothermal Pad maintained body temperature near a constant 37°C for 4 hours. Each pad measures 8" x 8" x 0.75".

MODEL	DESCRIPTION
39DP	3 Pads and 3 Insulators (board not included)
DPIP	1 Pad, 6" x 7.5"
DP-SASB	1 Pad, 6" x 4"

Deltaphase® Operating Board



This compact operating board takes advantage of the Deltaphase principle to maintain animal body temperature during surgical or experimental procedures. An 8.5" square stainless steel operating surface lies in contact with an activated Deltaphase isothermal pad. The underside of the pad is insulated to provide a longer isothermal period. Molded wells are provided for sponges, instruments and anesthetic apparatus.

This board was designed by research scientists to be functional, durable, and easy to clean. Its low cost and safety make it appropriate for use in student laboratories. The unit is supplied with two Deltaphase pads, each pad measures 8" x 8" x 0.75".

MODEL	DESCRIPTION
39OP	Operating Board, 2 Pads and 2 Insulators
39DP	Includes 3 Pads and 3 Insulators only (no board)
39OM	Operating Board, 2 Pads and 2 Insulators with magnetic board

Instruments shown not included.

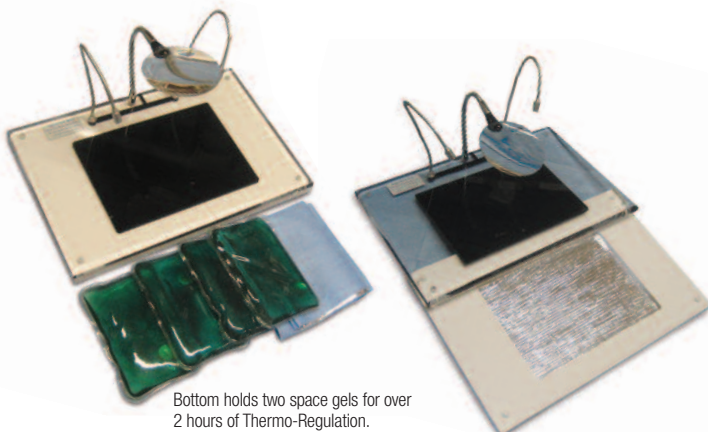
Shop online at www.BainTreeSci.com





Thermo Controlled Surgery Platform

Easily maintain animal body temperature during surgery!



Bottom holds two space gels for over 2 hours of Thermo-Regulation.

Space-age thermal reflector maximizes heat transfer.

- ▶ Two flexible LED lights provide direct illumination with no shadows and no heat
- ▶ Flex arm, non-obstructive rimless magnifying glass, 2.3 X main lens, 4.0 X inset lens. Allows continuous eye contact with object when moving into magnification area
- ▶ Limb restraints.
- ▶ 4 Space Gels for continuous heat or 2 Deltaphase® pads
- ▶ 2 Space Blankets to retain heat
- ▶ Thermo reflector and turbo heat sink to maximize heat transfer
- ▶ Non-skid feet for added stability
- ▶ Universal input power supply
- ▶ Size: 13.5"L x 9"W

MODEL	DESCRIPTION
ASS7T	Thermo Control Surgery Platform with Space Gels
SPGL-S	Space Gel Pad 4"x6"
SPGL-M	Space Gel Pad 5.5"x10"
SP-DR	Space Drape 3.5" x 10", (2 drapes per pack)
ASS7D	Thermo Control Surgery Platform with Deltaphase Pads
DPIP	Deltaphase Isothermal Pad, 6" x 7.5"

See microscope section for digital microscope attachments.

SpaceDrapes™

SpaceDrapes provide heat-retention capabilities while doubling as surgical drapes. They decrease recovery time and improve recovery prospect for animals that are under anesthesia by reducing radiant heat loss. They can be fenestrated and used as standard drapes. Available pre-packaged and pre-sterilized, or in rolls that can be sterilized by the user.



MODEL	DESCRIPTION
SP-TS	Space Drape 12" x 16", Flat (2 per pack)
SP-DR	Space Drape 3.5" x 10", (2 drapes per pack)
SP-MPS	4" x 5" Mouse Pouches (1 sterilized package of 5 pouches)
SP-RPS	9" x 12" Rat Pouches (1 sterilized package of 5 pouches)

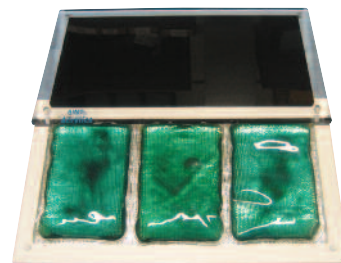
Thermo Controlled Recovery Pad

Animal recovery made simple and easy!

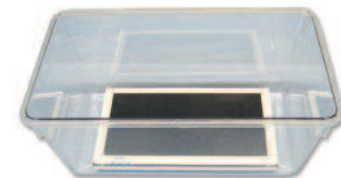
- ▶ Convenient size 13.5"L x 7.5"W
- ▶ 6 space gels for continuous heat
- ▶ 2 space blankets to retain heat
- ▶ Thermo reflector and turbo heat sink to maximize heat transfer
- ▶ Non-skid feet for added stability
- ▶ Fits into a standard 18"L x 9"W

Ultra-Safe Thermo Regulation:

- ▶ Will not over heat or burn animal
- ▶ No electricity used



Place animal on pad for recovery. Recovery pad will provide over 2 hours of Thermo-Regulation.



Shoe box cage not included.

MODEL	DESCRIPTION
TCRP	Thermo Control Recovery Pad (shoe box cage not included)
SPGL-S	Space Gel Pad 4"x6"
SPGL-M	Space Gel Pad 5.5"x10"
SP-DR	Space Drape 3.5" x 10", (2 drapes per pack)
DPIP	Deltaphase Isothermal Pad, 6" x 7.5"

SpaceGels™



SpaceGels heating pads are formed by sealing a super-saturated liquid solution in a pouch similar to an IV bag. The pouch also contains a small metal activator disc. When the disc is flexed, the solution "freezes" and solidifies, giving off heat in the

process. The heating pads reach a maximum temperature of about 130°F. Because the heating process is physical, not chemical, the pouches can be reused several hundred times. To reset a SpaceGel heating pad, simply heat through steaming or boiling until all crystals have dissolved. Once cooled, it can be reactivated and used again.

SpaceGels have many uses. A SpaceGel can be placed between a cage containing a recovering animal and the table to provide heat during recovery. Small animals can be placed on the heating pads with some sort of barrier (towel, cloth, etc.) A SpaceGel can be wrapped and placed on a part of the animal to be warmed, or on the arteries if warming a large animal.

MODEL	DESCRIPTION
SPGL-S	Space Gel Pad 4" x 6"
SPGL-M	Space Gel Pad 5.5" x 10"





Water Heated Hard Pads

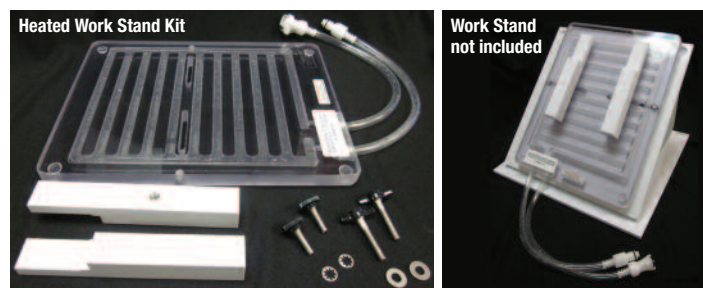
Connects to Gaymar, Hamilton and other pumps



Durable polycarbonate construction. Scalpel, needle, and towel clamp proof. Smooth surfaces are easy to clean helping to prevent nosocomial infection. Highly puncture resistant.

MODEL	DESCRIPTION
HHP-05	6"W x 8"D Heated Hard Pad
HHP-1	9"W x 12"D Heated Hard Pad
HHP-2	15"W x 24"D Heated Hard Pad
HHP-3	21"W x 24"D Heated Hard Pad
HHP-ADP-G	Adapter to connect to Gaymar Pump
HHP-ADP-A	Adapter to connect to Adroit Pump

Heated Work Stand Kit



Heated hard pad kit converts user's workstand into a heated workstand. Unit installs quite easily and can be ready for use in minutes with users existing or new Rodent Work Stand and circulating pump. Unit is also designed to be used as a stand-alone heated hard pad. Product is a great versatile addition. Work stand not included.

MODEL	DESCRIPTION
RW-HHP	Heated Rodent Work Stand Kit

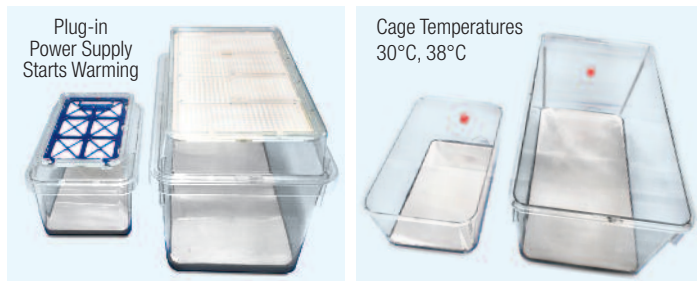
Rodent Work Stand

Rodent Work Stand is designed to support rats, mice and similar small rodents in a stable and comfortable position.



MODEL	DESCRIPTION
RW-A3467	Rodent Work Stand

New! Single Temp Warming/Induction Chamber

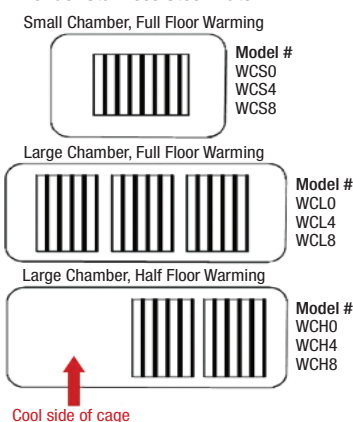


Post-surgery warming chamber/pre-surgery warming induction chamber provides continuous warmth to animals being anaesthetized before surgery or recovering from surgery.

Warming Chamber

- ▶ Standard small shoe box cage, 7" x 11" x 5", standard large shoe box cage, 10" x 19" x 8"
- ▶ Inlet/outlet port for gas anesthetic when used as an induction chamber
- ▶ Heavy duty power packs provide preset temperature. Universal input (110-220V) for use in any country
- ▶ Warming element sealed under stainless steel floor. Bedding material can be used in cage

Location of Warming Elements Under Stainless Steel Plate



Filter Top

- ▶ Allows animal to fully recover in chamber while unattended
- ▶ Includes membrane for sealing filter top and outlet port to exhaust gas when used as an induction chamber

Chamber includes one single temp UIHD-power pack, induction conversion kit and operating instructions,

Important Note: Cage floor temperatures were measured with an ambient room temperature of 70°F (21°C). Room conditions and table temperature will slightly increase/decrease cage floor temperature.

MODEL	DESCRIPTION
Small Chamber 7" x 11" x 5", Full-Floor Warming	
WCS0	30°C Single Temp Small Warming/Induction Chamber
WCS4	34°C Single Temp Small Warming/Induction Chamber
WCS8	38°C Single Temp Small Warming/Induction Chamber
Large Chamber 10" x 19" x 8", Full-Floor Warming	
WCL0	30°C Single Temp Large Warming/Induction Chamber
WCL4	34°C Single Temp Large Warming/Induction Chamber
WCL8	38°C Single Temp Large Warming/Induction Chamber
Large Chamber 10" x 19" x 8", Half-Floor Warming	
WCH0	30°C Single Temp Large Warming/Induction Chamber
WCH4	34°C Single Temp Large Warming/Induction Chamber
WCH8	38°C Single Temp Large Warming/Induction Chamber

Extra Power Packs

PP30	30°C Single Temp, UIHD-Power Pack
PP34	34°C Single Temp, UIHD-Power Pack
PP38	38°C Single Temp, UIHD-Power Pack

Universal Input 110-220V, can be used with any warming chamber



T/Pump®

The T/Pump® system provides safe and effective core body warming and cooling therapy with precise temperature control. It helps prevent body heat loss and hypothermia during surgery and recovery. Cooling setting delivers 50°F (10°C) therapy.

- ▶ For warming therapy, two selections are available: low (100°F/38°C) or high (107°F/42°C)
- ▶ Three-layer safety system with dual temperature sensors, dual microprocessors and a mechanical thermostat to ensure patient safety
- ▶ Illuminated LED control panel, comfortable handle, built-in hose, cord storage and translucent water reservoir designed for ease of use
- ▶ Uses tap water (and ice cubes if cooling)



MODEL	DESCRIPTION
TP-700	Gaymar Heating/Cooling Water Pump
TP-D22C	Gaymar Multi-T Pad, 15" x 22" Single Patient, each
TP-R22G	Multi-T Pad, 15" x 22" Reusable, each
TP-D3E	Multi-T Pad, 3" x 23" Single Patient. 10/case
TP-D12E	Multi-T Pad, 13" x 18" Single Patient, 20/case

ThermaZone® Hot/Cold Therapy Pump

ThermaZone® thermal therapy pump provides hot or cold water circulation in a little as ten minutes. Achieves cold water temperatures of 55°F in less than two minutes and 37°F in 10 minutes without ice. Veterinary version comes with standard power supply.



- ▶ Broad temperature range - from 34°F to 125°F
- ▶ 12 volt power supply allow for portable applications in a car
- ▶ Closed system allows for hot or cold at the switch of a button
- ▶ Small footprint, small amount of water

MODEL	DESCRIPTION
IP003-07	ThermaZone Hot/Cold Therapy Pump

Reusable Neoprene Pad



For use with ThermaZone hot/cold therapy pump. Water circulating pad 6" x 9" with leak proof connectors.

MODEL	DESCRIPTION
IP003-22	Reusable Neoprene Pad

Heat Therapy Pump

The safest and most accurate localized heat therapy system available. Bright and easy-to-read display provides continuous real-time temperature readings. Digital controller uses proprietary software to manage users prescribed set-point temperature to within 1°F. Three temperature safety limits guard against possibility of overheating and Hi Limit Switches can be tested without taking unit apart!

Specifications

Set-point range: 75°F (Off) to 107°F

Set-point accuracy: 0.5°F

Flow rate: ≥15gph

Reservoir: 50 oz (1,500 ml)

Approvals: µL 2601, CSA C22.2 No. 601-1 51DF

- ▶ Mercury free!
- ▶ Uses tap water



MODEL	DESCRIPTION	UNITS
HTP-1500	Heat Therapy Pump	each
AP-D22C	Single Patient Pad, 14" x 20"	20/case
AP-D26E	Single Patient Pad, 18" x 24"	20/case
AP-R22G	Reusable Pad, 16" x 20"	each

Additional sizes available online at BraintreeSci.com.

Soft-Temp Reusable Veterinary Heating Pads

Soft-Temp reusable pads are the perfect solution for veterinary warming.

- ▶ Available in four sizes, pads fit table-tops, surgery tables and in kennel cages
- ▶ Soft-Temp pads work best with Adroit's HTP-1500 pump, but adapters are available for use with different pumps
- ▶ Pads may be used directly against the skin or covered with pillow cases or light-weight fabric for added protection against damage
- ▶ Heavy-duty pads can be patched if needed



MODEL	DESCRIPTION	SIZE
AP-AV-016	Small Soft-Temp Veterinary Heating Pads	16" x 20"
AP-AV-029	Medium Soft-Temp Veterinary Heating Pads	20" X 29"
AP-AV-044	Large Soft-Temp Veterinary Heating Pads	20" X 44"
AP-AV-057	X-Large Soft-Temp Veterinary Heating Pads	20" X 57"
AP-AV-PATCH	Heating Pad Patch Kit	





New! MTC-1 Animal Micro Temperature Controller

- Control warming blankets and heat plates
- Control Range of ambient to 99.9°C
- Resolution 0.1°

Recent interest in a simple low cost temperature controller to maintain small animal temperatures was the reasoning behind the development of the MTC-1 micro temperature controller. Utilizing a precision highly stable platinum RTD as the feedback sensor, this controller will display and maintain a set temperature within $\pm 0.1^\circ\text{C}$. Controller is designed to operate from a 12VDC supply and can control an output current up to 4 amperes (50 watts). Can also be used with an input voltage between 6 and 24VDC for both lower and higher power applications (up to 90 watts). $\frac{1}{2}$ " backlit LCD readout provides continuous display of temperature with 0.1° resolution. Set point is easily adjusted from just above room temperature up to 99.9°C via a 20 turn potentiometer. A momentary switch allows user to toggle display between the set and run temperatures. Controller combined with either a heat plate or warming blanket is ideal for maintaining the temperature of mice, rats and small animals.



MODEL	DESCRIPTION
MTC-1	Animal Micro Temperature Controller
MTC-HP-1M	Heating Plate for MTC, 4.375" W x 8.5" L
MTC-HP-4M	Heating Plate for MTC, 1.5" W x 4" L

Thermalert Monitoring Thermometer

- Large digital display - Reads to 0.1°C in clinical range 25-45°C
- High stability - no calibration necessary
- Safe, low voltage battery operation
- Long battery life - 1200 hours

This economical, easy to use thermometer is intended for continuous monitoring in the laboratory. The digital display reads to 0.1°C. For safety, the unit is battery operated. Batteries last for 1200 hours. A variety of fast reading microprobes and special animal probes are available for the TH-5. TH-5 can be supplied with analog output for lab applications where strip chart recording is needed.



Specifications:

Temperature range: 25 to 45°C

Resolution: 0.1°C

Instrument accuracy: 0.1°C $\pm$ 1 digit

Calibration: Conforms to National Bureau of Standards tables
Monograph 125

Readout: 0.5" liquid crystal

Batteries: 4 "C" cells

Battery life: 1200 hours continuous

Analog output: Available at extra cost. Approx. 10mV per °C

MODEL	DESCRIPTION
TH-5	Thermalert Monitoring Thermometer
TH-5A	Thermalert Monitoring Thermometer with analog output
TT-S-5	Thermalert Stand

TCAT-2 Temperature Controller

Our new TCAT-2 general purpose PID autotuning controller provides accurate temperature control in a variety of laboratory applications. Combined with a heat lamp or heating pad, the TCAT-2 may be used to maintain the body temperature of anesthetized animals during surgery or stereotaxic procedures. Small animal cages are easily warmed with a heat lamp. The TCAT-2 may also be used in cooling applications, such as to control independent perfusate cooling systems.



Realizing that laboratory applications are diverse, TCAT Controller is provided in several versions. The model specified depends upon whether a laboratory has a general or specific need for the controller.

MODEL	DESCRIPTION
TCAT-2AC	Controls AC only powered heating or cooling devices such as a heat lamp.
TCAT-2LV	Provides low voltage DC output for electrically sensitive applications where AC frequencies might interfere with other monitoring devices. Includes built in DC power.
TCAT-2DF	Includes both AC outlet for controlling primarily resistance loads such as heat lamps, AC powered warming blankets and a low-voltage, low noise, DC output for heating pads. Allows user to control a variety of different loads.

All TCAT-2 versions may be used with any of our extensive line of accurate Type T thermocouple probes, which act as the temperature feedback sensor. Most commonly used are the RET series of animal rectal probes, but the IT series of implantable flexible probes and MT series of needle probes may also be used depending upon the specific application. All instruments are designed to operate on a 110V or 230V AC supply.

MicroTherma 2T

The MicroTherma 2T is compact, easy to operate and reliable. The popular MicroTherma Series makes use of a unique line of high-precision type T thermocouples. The combined result provides the best accuracy available in handheld thermocouple measurements. Self-diagnostic recalibration takes place each time the meter is powered on.

Each time the user checks the calibration of MicroTherma against an external standard, finding will be within spec – no adjustments required. Each MicroTherma includes a traceable cal certificate with actual test data. Although the precision thermocouples provide the best possible accuracy for interchangeable probes, the MicroTherma also allows a "system-cal" adjustment to offset any probe errors. Choose probes from our broad line of type T thermocouples.

- Accepts type T thermocouples
- $\pm 0.2^\circ\text{C}$ meter accuracy
- Self-calibrating circuitry
- Includes hold, max and min functions switchable °C or °F



MODEL	DESCRIPTION
TW2-107	Microtherma 2 Type "T" Thermometer
TW2-205	Protective PVC Boot
TW2-100	Small Attache Case, fits 1-2 probes



Hand Held Rodent Thermometer

- ▶ 1 T1 channel
- ▶ Resolution: 0.1°C
- ▶ Functions: records max, records min, hold
- ▶ 2.5 measurements/sec refreshing screen
- ▶ Time measurement display from start with dedicated key
- ▶ Includes carry case and batteries
- ▶ Rectal probe sold separately
- ▶ Accepts all type "T" thermocouple probes
- ▶ RS-232 output exports data to programs such as Excel (software not included)



TK-8851 thermometer combines electronic accuracy and simplicity of reading with a large readable screen. Ideal for temperature measurements on rodents (rats or mice). Features a large backlit digital display and time measurement.

LCD display features timer and rubber keys making it easy to use.

Specifications:

Temp Range: -200°C to 390°C (according to probe)
(for 18 to 28°C ambient temp.)

Temp Accuracy: +/- (0.1% reading + 0.7°C)
(for 18 to 28°C ambient temp.)

LCD Size: 30mm x 51mm (H x W)

Operating Temp: 0 to 50°C

Operating RH: Humidity <80%

Battery: 9V

MODEL	DESCRIPTION
TK-8851	Hand Held Temperature Measurement Thermometer

Heat Lamp

Optional infrared heat lamp is table mounted with a standard "u" screw clamp that expands to fit tables up to 2.25" deep. An 18" adjustable swing arm provides easy adjustment of radiant heat to specimen. The lamp is supplied with a 250w (infrared) heat lamp bulb and a built in reflector. A chrome bulb guard is also provided and easily snaps onto the lamp housing after the bulb is installed. Fits standard 110v AC socket. Power: 10 watts.



MODEL	DESCRIPTION
HL-1	Heat Lamp with table clamp
HL-1B	Heat Lamp with base

Heating Plate

Optional direct current heating plate for small rodents (mice and rats). Standard plates are black anodized aluminum.

- ▶ HP-1M measures 4.375"W x 8.5"L
- ▶ HP-4M measures 1.5"W x 4"L
- ▶ Both models have small feet attached giving them an elevation of .25" above the surface it sits on, such as a table or stereotaxic stage
- ▶ Easily cleaned with alcohol
- ▶ Provided with a feedback sensor to prevent overheating when used with TCAT-2 series of controllers
- ▶ Custom sizes are also available with longer lead times



MODEL	DESCRIPTION	DIMENSIONS
HP-1M	Heating Plate	4.375" W x 8.5" L
HP-4M	Heating Plate	1.5" W x 4" L

Warming Blanket

Flexible blankets for use with TCAT-2LV and TCAT-2DF controllers. Blankets use far infrared radiation to penetrate deep into the body.



- ▶ Small blanket (8" x 6") is suitable for mice and small rats
- ▶ Large blanket (14" x 14") is suitable for adult rats and guinea pigs

Specifications:

Power: 9.5 V @ 1.5 amps

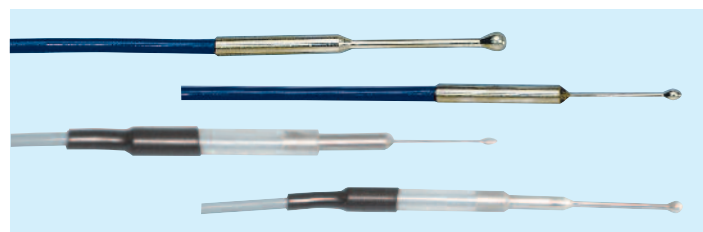
Over Temperature Protection: 100 Ohm RTD

Lead Length: 3'

Material: Antibacterial washable surface

MODEL	DESCRIPTION
WB-1	Small Warming Blanket 8" x 6"
WB-2	Large Warming Blanket 14" x 14"

Animal Rectal Probes



For fast intermittent measurements. The isolated sensor can be used with monitoring equipment where electrical interference from other electrodes may be present. Reinforced strain relief for applications where probe is in more frequent use. Smooth ball tip, 1" long stainless steel shaft, 0.059" dia. 0.125" tip diameter, 5' lead length. Time constant 0.8 secs.

The RET-4 and RET-5 rectal probes are for very small animals and neonatal mice. Flexible polyurethane sheath with smooth rounded tip. .36" long (can be made longer). Time constant 0.18 seconds. Max temp. 140°C. May be sterilized by Gas (ETO), glutaraldehyde solution or autoclave.

MODEL	DESCRIPTION
RET-2	Rectal Probe for Rats - 1" long, 0.59" dia., 0.125" tip dia.
RET-3	Rectal Probe for Mice - 0.75" long, 0.028" dia., 0.065" tip dia.
RET-4	Rectal Probe for Very Small Animals, 0.032" dia.
RET-5	Rectal Probe for Neonatal Mice, 0.02" dia.
RET-2-ISO	Rectal Probe for Rats with isolated sensor
RET-3-ISO	Rectal Probe for Mice and Neonatal Rats with isolated sensor
DSP-1	Disposable probe sheaths, 1,000/pk

Flexible Implantable Probes - IT Series

IT series flexible microprobes can be used for tissue implantation, measurement of small volume liquid samples, rectal temperatures in baby mice, etc. Totally sheathed in chemical resistant Teflon. Quite rugged. Max temp. 150°C. Isolated. Type # designates needle gauge. (Or one gauge smaller in thin wall).

MODEL	DESCRIPTION
IT-14	0.050" diameter, constant 0.3 seconds, 3' lead length
IT-18	0.025" diameter, constant 0.1 seconds, 3' lead length
IT-21	0.016" diameter, constant 0.08 seconds, 1' lead length
IT-23	For ultra fast measurements and use on micro-size specimens. Sensor lead only 0.009" dia. Tissue implantable with 23ga needle (supplied). Rather fragile. Max. temp. 150°C. Time constant 0.005 secs. 3' lead. Teflon coated, isolated.
IT-1E	IT-18 with sensor bead exposed. Combines the ultra-fast response of IT-23 with the Teflon sheath strength of IT-18. Time constant 0.005 seconds, isolated.



Infrared Thermometer

Measures cutaneous temperature of small rodents (mouse and rat) **very fast and contactless**. Reliable and non-invasive method to measure skin temperature and can then be correlated to rectal temperature.

Optical dimension and position of IR sensor allows measurements on very small surfaces without allowing sensor to get wrong values arrived from integration of environment temperature. Allows **easy measurements even on mice tails** - with high accuracy and repeatability.

This thermometer does not replace a rectal one: cutaneous measurement should be correlated with usual rectal temperatures (see our RET-2 and 3 Rectal Probes for rodents). IR-B153 thermometer is especially accurate on a temperature range from 25-40°C and proves to be useful for other lab applications as well. Please note: it is impossible to provide correlation tables between skin and rectal temperatures, as the correlation depends on the animals, their stress, etc.



MODEL	DESCRIPTION
IR-B153	Infrared Thermometer

Close Focus Infrared Thermometer

- ▶ 0.7" (18mm) measurement distance
- ▶ 0.1" (2.5mm) spot size
- ▶ Dual laser
- ▶ Maximum temperature and hold features, easily switches from °C to °F



Measure temperature precisely to 0.1" (2.5mm) with the CF-IR Close Focus Infrared Thermometer. Measures tiny areas with precision.

CF-IR multi-line display includes a real-time clock and measurement of ambient temperature for convenience. Other features include Min/Max, Hold, adjustable emissivity, clock and built-in stop watch. Measure temperatures from - 67°F to 428°F at 0.7" (18mm) distance.

MODEL	DESCRIPTION
IR-CF	Close Focus Infrared Thermometer

Pocket Infrared Thermometer

The absolute best value in palm-sized IR thermometers



Professional 6:1 optics give a 1" measurement spot at a 6" distance. Fits comfortably in palm with trigger button on side. Simple mode button steps through Max, Min, C/F, and adjustable emissivity.

Includes infrared thermometer, neck lanyard, two CR2032 batteries pre-installed and user manual with certificate of conformance.

Specifications:

Range: -67 to 482°F (-55 to 250°C)

Accuracy: $\pm 3.6^\circ\text{F}$ ($\pm 2^\circ\text{C}$) $\pm 2\%$ of reading or, whichever is greater

Resolution: 0.1°F or °C to 199.9, 1° above

Units: Switchable °F to °C

Response: 1 second

Distance/target: 6:1 (1" target diameter at 6" distance)

Emissivity: Default 0.95, adjustable 0.05 to 1 in 0.01 increments

Environmental range: 32 to 122°F (0 to 50°C)

Battery: 2x CR2032 included, 40 hours

Wavelength: 5-14µm

MODEL	DESCRIPTION
IR-TW2	Pocket Infrared Thermometer



Visit our website at www.BraintreeSci.com

AIMS Neonate and General Rodent Tattoo Systems

Simple, quick and easy permanent animal identification



Convenient comprehensive kits for the humane tattoo identification of neonate or adult mice and rats. Each kit is provided with a comprehensive training guide and instruction DVD and all the tools needed to safely and efficiently tattoo rodents. AIMS

tattooing techniques are performed on unanesthetized animals and produce easy-to-read permanent ID's. AIMS tattoo pigments and supplies have been used in the industry for over 25 years and have been demonstrated to be **safe** and **non-toxic**. Tattoo identification is cost effective with an average disposable cost of about 2¢ per neonate and 5¢ per adult rodent.

The NEO-9 Neonate Tattooing System

For tattooing P0-P15 neonate rodents of any color/strain.

Kit includes:

- ▶ Micro controller with HDUI power supply
- ▶ Foot pedal (on/off)
- ▶ Preset speeds
- ▶ Ultra light tattoo machine
- ▶ Non-skid machine platform with pigment holder
- ▶ AIMS certified safe tattoo pigment
- ▶ AIMS skin prep (reduces fading)
- ▶ Standard/fine tip tattoo needles
- ▶ Micro tattooing station (light, skin prep holder, 4x magnification)
- ▶ Finger guards
- ▶ Needle scanning scope
- ▶ Comprehensive DVD instructions and carrying case
- ▶ Detailed training guide provides step-by-step guidance and detailed illustrations on multiple ID schemes with large number ranges (>9,000).



Neonate tattoo identification is a practical and humane alternative to toe clipping (non-invasive). Toe tattoos allow user to use existing numbering system without removing the toe. Included supplies will tattoo 2000 neonates. (Continued next page.)

For additional supplies visit www.BraintreeSci.com





The AIMS ATS-3 General Rodent Tattoo System



Supplies and accessories to tattoo 3,000 weanling rodents and larger. The detailed training guide and instruction DVD provide step-by-step guidance with detailed illustrations. Use numbers, letters, lines, dots, and/or colors to permanently ID any color/strain mouse or rat.

Kit includes:

- ▶ AIMS standard tattoo machine with calibrated needle tube
- ▶ Micro controller with extended machine speed
- ▶ AIMS humane rapid mouse cup restraint system
- ▶ Tail tattoo reading light
- ▶ Certified safe/non toxic supplies and tattooing accessories
- ▶ 242B concentrated black pigment for C57 and B6 mice

Can be used for neonate rodent tattooing when purchased with the neonate accessory package.

Neonate accessory package includes:

- ▶ Micro Tattooing Platform (with light, 4x magnification, skin prep holder and DC power supply)
- ▶ Finger guards
- ▶ Neonate pigment
- ▶ Skin prep
- ▶ Fine tip needles
- ▶ Instruction book and DVD



Micro Tattooing Platform

Large Lab Animal Tattoo System

AIMS ATS-3L large lab animal tattoo system is a compact tattoo kit specifically developed for tattoo identification of large laboratory animals (hamsters, guinea pigs, ferrets, rabbits, NHP, swine – anything larger than a mouse/rat).

Kit includes:

- ▶ AIMS ultra-light tattoo machine
- ▶ Foot pedal on/off micro-controller
- ▶ AIMS small/large bore calibrated needle tube
- ▶ Select large animal tattoo needles
- ▶ Small equipment profile (quick setup/pickup)
- ▶ Reduced animal stress (quick tattooing)
- ▶ Easy cleaning and sterilization between animals
- ▶ Detailed operating and tattooing instructions
- ▶ Unlimited technical support from AIMS

Quiet Tattoo Machine version also available

Reduces noise level which leads to a calmer animal, 54% lighter, better balance, less hand fatigue.

MODEL	DESCRIPTION
NEO-9	Neonate Rodent Tattoo System Includes Lab Animal Tattoo Identification Vol. 1, Neonate Mice & Rats and DVD Instruction Video
NEO-9Q	Quiet version of the NEO-9
ATS-3	General Rodent Tattoo System Includes Lab Animal Tattoo Identification Vol. 2, Adult Mice & Rats and DVD Instruction Video
ATS-3Q	Quiet version of the ATS-3
ATS-3L	Large Lab Animal Tattoo System with instruction book
ATS-3LQ	Quiet version of the ATS-3L
NEO-AP	Neonate Accessory Package
NTS-01	Micro Tattooing Platform

Large Lab Animal Upgrade Package

LLA-AP Adds custom accessories and detailed instructions to easily tattoo identify large lab animals.

Battery Operation Upgrade Package

BPO-AP Adds remote operation capabilities to the ATS-3. Eliminates need for electrical outlet. Allows extended operation in any location. Ideal for field work animal identification!

Ear Punch



EP-T

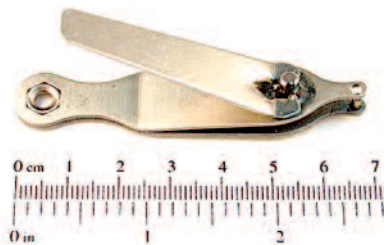


EP-S

MODEL	DESCRIPTION
EP-S-901	1mm Punch (scissor style)
EP-S-902	2mm Punch (scissor style)
EP-T-900	Ear Punch 2mm (thumb style)
EP-T-M900	Miltex 2mm (thumb style)

Clipper Style Ear Punch

- ▶ 2mm
- ▶ Small animal ear punch



MODEL	DESCRIPTION
EP-900-CLP	Clipper Style Ear Punch

Small Animal Ear Tag

Stainless steel applicator is designed to seal tags with minimal pressure, while providing a secure seal. Applicator can be used with or without the spring. Spring applies slight closing pressure to help hold tag in applicator prior to sealing.



MODEL	DESCRIPTION
EP-1005-S1	Stainless Steel Small Animal Ear Tag Applicator
EP-1005-1	Small Animal Ear Tags (1,000 pieces)

Custom numbering available. Visit BraintreeSci.com for details



SMART Tager



Continuous Small Lab Animals Ear Tag Applicator for mouse and rats. SMART Tager is an innovative applicator, which allows for continuous and fast application of ear tags to lab animals for the purpose of labeling, category and management. Unlike any other ear applicators, SMART Tager is specifically designed and built for continuous ear tagging. One single load of ear tag strip is able to label 10 animals. Easy, fast and efficient!

- ▶ SMART Tager and tags can be sterilized at 135°C for one hour. Tags are made of clinically proven metals, and ear tag strips are adhered with medical grade epoxy resin, which will not cause allergy, or tissue damage
- ▶ Single ear tag inside: 7/16" length x 9/64" height
- ▶ Single ear tag outside: 9/16" length x 3/16" height x .140" width

MODEL	DESCRIPTION
ST-201	SMART Tager Continuous Applicator
ST-205	Small Animal Ear Tags, 1,000 tags

Ear Puncher

A small and efficient ear puncher with spring action. Allows user to come closer when marking animal and is also equipped with a sloped edge for a clean cut. Autoclavable, but should be lubricated afterwards for long and trouble free usage. 11cm long with a 2mm diameter hole.



MODEL	DESCRIPTION	HOLE DIAMETER
EP-A7020	Ear Puncher	2mm

Ear Punch Pincher

These pinchers were developed after having several testimonies from customers with sore wrists and thumbs from using small ID punchers. The Ear Punch Pincher relieves stress on wrist during ID marking as it requires a very gentle pressure to cut a hole. Stainless steel puncher has a sloped edge which provides a cut rather than a punch, which minimizes animal discomfort. Autoclavable, but should be lubricated afterwards for long and trouble free usage.



MODEL	DESCRIPTION	HOLE DIAMETER
EP-SA7000	Ear Punch Pincher	2mm
EP-SA7075	Ear Punch Pincher	2.75mm

RFID Transponders for Animals

Radio frequency identification provides laboratories with a secure method to identify animals. Unified information devices (UID) provides implantable transponders, readers, and multiple tag programming that is compatible with any LIMS system. UID also creates customized software solutions based on individual laboratory processes in order to computerize Excel sheets. UID transponders and readers integrate flawlessly with Provantis®, Pristima™, PDS, Topaz, and many others for easy and secure data collection. UID also has a complete line of Trovan and ISO Standard compatible transponders available. Implantable

Each transponder is supplied in a triple ground cannula for easy insertion.

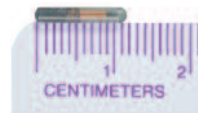
Implantable RFID Chips for Mice

- ▶ Smallest transponder on the market
- ▶ 1.4mm x 8.5mm in a sharp cannula
- ▶ Sterile and individually packaged



Implantable RFID Chips for Rats

- ▶ The most widely used size for rodents and other animals
- ▶ 2.1mm x 12mm in a sharp cannula
- ▶ Sterile and individually packaged



Hand Held Transponder Reader

- ▶ USB or Bluetooth connectivity
- ▶ Battery powered
- ▶ Available protective case

UID readers are designed to work with the secure UID transponders. Each transponder has an encryption that only allows for communication with a UID compatible reader. All UID Readers are fully compatible with any LIMS or other software that allows input of Identification Data. Stand ISO readers are also available.



Chip Provisioning Station

Most advanced multi-transponder programmer available. New provisioning station allows users to program up to 6 transponders at one time. Program exact number or letter sequence specific to user needs. *Patent pending.*



MODEL	DESCRIPTION	QTY
RFID-UC-1485	Mouse Glass with cannula	24
RFID-UC-1485Q	Mouse Glass with cannula	198
RFID-UC-1485R	Mouse Glass with cannula	990
RFID-UC-2112	Rat Glass with cannula	24
RFID-UC-2112Q	Rat Glass with cannula	198
RFID-UC-2112R	Rat Glass with cannula	990
RFID-UPGI	Plastic Pistol Grip Injector	
RFID-UPGI-SS	Stainless Steel Injector Surgical Ready	
RFID-USI-1	Syringe Injector with Spring	5
RFID-URH1-1L-12	Hand Held Transponder Reader with charger	
RFID-UPS-60	Chip Provisioning Station	
RFID-URH-1*	Hand Held Reader Case	

*BK = black, R = red, O = orange, BL = blue



Aramis Micro-tattoo System

A revolutionary method for humane identification of laboratory animals



Micro-tattooing forceps with disposable hypodermic needle.

Individual identification is essential for maintenance of health/study records and management of colonies of

laboratory animals. This instrument is in compliance with regulatory agencies and research protocol requirements for care and use of laboratory animals.

Advantages: Permanent mark is easily readable on pigmented or albino animals. Rapid and easy to apply. Almost infinite ID numbers. Sterile and disposable hypodermic needles prevent spread of potentially infectious disease. Inexpensive and humane.

Instructions: Choose the needle. Fill ink tank. Immobilize animal.

Squeeze instrument. Identification with grid location

The needle is re-inked when it enters the ink tank on the other side.

Discomfort of animal is minimal and equivalent to a quick injection with a very fine needle.

Kit includes: 1 oz. of Ketchum green tattoo paste, 1 aluminium planchette, Plastic holding case, 2 practice hypodermic needles

MODEL	DESCRIPTION
MTK-ARAMIS	Complete Microtattoo Kit
MTP-1	Green Tattoo Paste, 1 oz.
MTP-5	Green Tattoo Paste, 5 oz.

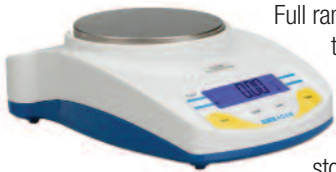


Shop online at www.BraintreeSci.com



Scales and Balances

Core™ Compact Portable Balances



Full range tare, 9 weighing units, zero tracking, simple 4 button operation, backlit LCD display, stainless steel pan, ShockProtect™ overload three-point protection, can be stacked for storage (120mm pan size only). Lock

down mounting slot for Kensington™ type lock and cable. Dual tare keys, lightweight and portable, modern low profile design. Color coded, sealed keypad. Low cost and simple to use. External calibration. Battery power (6 x AA batteries) and includes AC adapter. Auto sleep/power down function to save battery life.

MODEL	CAPACITY	PLATFORM SIZE	READABILITY
CQT 202	200g	4.7 Ø/120mm Ø dia	0.01g
CQT 251	250g	4.7 Ø/120mm Ø dia	0.1g
CQT 601	600g	4.7 Ø/120mm Ø dia	0.1g
CQT 1501	1500g	4.7 Ø/120mm Ø dia	0.1g
CQT 2601	2600g	5.7 Ø/145mm Ø dia	0.1g
CQT 2000	2000g	5.7 Ø/145mm Ø dia	1g
CQT 5000	5000g	5.7 Ø/145mm Ø dia	1g

Specimen Box with cover



Specimen box holds rodents for weighing purposes.

Specifications:

Dimensions: 4"H x 9"W

Weight: 157g

MODEL	DESCRIPTION
SB-8053	Specimen Box with cover

CB Compact Portable Scale

- ▶ Portable with battery power
- ▶ Stainless steel pan
- ▶ g, oz and lb



Ideally suited for a variety of uses and applications, small and easy to use. Bright green backlit LCD display shows clear results, with a simple to use keyboard and Grade 304 stainless steel removable top pan for easy cleaning. Weigh units: grams, ounces and pounds, selectable. Batteries included. Optional mains adaptor can be purchased.

MODEL	CAPACITY	PLATFORM SIZE	READABILITY
CB-501	500g	5.1" Ø/130mm Ø	0.1g
CB-1001	1000g	5.1" Ø/130mm Ø	0.1g
CB-3000	3000g	5.1" Ø/130mm Ø	1g

New! Anti-Vibration Table



Ergonomically styled, table offers a solid, stable surface developed specifically to help decrease vibration during measurement. When used with a weighing balance, it allows the balance to perform with marked precision, despite air currents or movements that might cause readings to fluctuate.

Easy to assemble, with all necessary tools supplied. Internal working surface measures 15.7" x 17.7" (400 x 450mm), allowing ample space for a balance. Large, scratch-resistant dark granite slab sits on shock-absorbing rubber mounts, while leveling feet accommodate uneven surfaces. The balance fits in the middle of the granite surface, stabilizing the base and enabling greater precision.

MODEL	DESCRIPTION
AD-VT	Anti-Vibration Table



ALZET® Osmotic Pumps



ALZET pumps are miniature delivery systems designed to provide constant, accurate administration of test agents. These self-powered pumps offer a convenient and efficient method for long-term dosing of mice and rats. Pumps are sold empty, and are easily filled with your test agent via syringe. Self-powered pumps are then implanted either subcutaneously or intraperitoneally. Twelve pump models offer a range of release rates and durations to meet your specific research needs. Continuous delivery of up to 4 weeks is feasible with a single pump, and even longer durations can be achieved through serial implantation of pumps.

Pumps sold in multiples of 10. Each package comes complete with one filling tube, 10 flow moderators and detailed instructions.

MODEL	DESCRIPTION
AP-1003D	1µL/hr, 3 days, 100µL
AP-1004	0.11µL/hr, 28 days, 100µL
AP-1007D	0.5µL/hr, 7 days, 100µL
AP-1002	0.25µL/hr, 14 days, 100µL
AP-2001D	8µL/hr, 1 day, 200µL
AP-2001	1µL/hr, 7 days, 200µL
AP-2002	0.5µL/hr, 14 days, 200µL
AP-2004	0.25µL/hr, 28 days, 200µL
AP-2006	0.15µL/hr, 42 days, 200µL
AP-2ML1	10µL/hr, 7 days, 2ml
AP-2ML2	5µL/hr, 14 days, 2ml
AP-2ML4	2.5µL/hr, 28 days, 2ml

Filling Tubes

Filling Tubes supplied in multiples of 10.

MODEL	DESCRIPTION
A-FT100	Filling tube for 100 microliter pumps
A-FT200	Filling tube for 200 microliter pumps
A-FT2	Filling tube for 2 milliliter pumps

For pricing visit BraintreeSci.com

Brain Infusion Kits

Many agents do not cross the blood-brain barrier sufficiently to evaluate their effects on the brain without administration directly into brain. Often local infusion directly into brain is only way to generate reliable data. For use with ALZET pumps for targeted delivery to the central nervous system.

- Infusion into cerebral ventricles exposes a wide variety of brain regions to infusate via cerebrospinal fluid which bathes brain
- Direct microperfusion of discrete brain structures results in localized distribution of infusate in target tissue

Includes materials for 10 brain infusions: 10 brain infusion cannulae, 10 vinyl catheter tubes, 40 depth-adjustment spacers, and instruction sheet.

MODEL	DESCRIPTION
BIF KIT1	28g, 3-5mm L
BIF KIT2	28g, 3-mm L, low profile, wide pedestal
BIF KIT3	30g, 1-3 mm L, low profile, wide pedestal

Intravenous Osmotic Pump Catheter



Braintree Scientific's Micro-Renathane® based catheter for the continuous, intravenous (via the jugular vein) administration of drug solutions delivered with the ALZET® Osmotic Pump. Catheter can be modified for infusion via other blood vessels (please inquire).

Supplied non-sterile

MODEL	DESCRIPTION
R-JVC-AP	Rat Intravenous Osmotic Pump Catheter
M-JVC-AP	Mouse Intravenous Osmotic Pump Catheter

Perfusion System



AutoMate In Vivo Manual Gravity Perfusion System

Take the guesswork out of your new animal fixation system

Providing an option for scientists who would rather do science than design a system and source parts. Let AutoMate take the guesswork out of your new animal fixation system. Steady gravity-fed delivery of buffer and fixative, results in complete perfusion. Easy to set up, use and clean. Complete system with everything down to the needles. Fits in standard hoods at a fraction of the cost of a peristaltic pump and more reliable. One or two users can perfuse two mice simultaneously with the Double In Vivo system.



- Four reservoirs and two stopcocks are mounted for two independent wash buffer and fixative deliveries on the same ringstands
- 2-way manual stopcock makes for easy one-handed operation to switch solutions
- Consistent results - steady gravity-fed delivery of buffer and fixative results in complete perfusion
- Easy to set up, use and clean - complete system with everything down to the needles. Fits in standard hoods
- Fraction of the cost of a peristaltic pump and more reliable

MODEL	DESCRIPTION
IV-140	InVivo Perfusion System 140ml - Mouse
IV-800	InVivo Perfusion System 800ml - Rat
IV-4140	Double InVivo Perfusion System 4x 140ml - Double Mouse



BS-900 Programmable Peristaltic Pump

Have a need to accurately fill multiple bottles, vials or other containers with a liquid? The learn and repeat mode of the BS-900 Peristaltic Pump makes even the smallest of businesses highly productive right from day one.

BS-900 is equipped to be used in many settings from small business to large factory floor. Pump can be integrated into existing production lines or simply stand alone.

BS-900 comes fully programmable and can be operated manually or with a PC through a RS-232 communication port at no extra cost.

Flow rates vary from a minimum of 0.5ml/hr to a maximum of 1250ml/min. The pump's specialty is its small scale production dispensing. It will fill numerous bottles, vials, etc. with fluids of all types.

Equipped for mass production dispensing at a price affordable for small business, this pump is a great deal no matter your purchasing power.

Easy-to-use keypad interface, space saving chassis: Foot print size of only 7.75" x 7" - won't take up unnecessary space on laboratory or production bench.



The YB2 Peri Head is included with the pump. This is a 2 roller 3/16" ID tubing kit. Maximum dispense rate is 775ml/min. Kit includes blue 2 roller head, 4 ft. of tubing, 1.75" nylon clamp ties and a vial of lubricant.

- ▶ Dispense and withdrawal pumping
- ▶ Dispense and withdrawal volumes separately accumulated
- ▶ Programmable dispense volumes
- ▶ Non-volatile memory of all operating parameters and pumping program
- ▶ Programmable phases allow complex pumping applications and interaction with external devices. RS-232 bi-directional control
- ▶ Built-in pump network driver. Pump network supports up to 100 pumps and other devices
- ▶ Two modes of RS-232 control: Basic and Safe. Safe mode provides communication error detection, loss of communication detection, and automatic transmitting of alarm conditions
- ▶ TTL I/O with software filtered control inputs to eliminate glitches and ringing on control inputs. Configurable TTL operational trigger
- ▶ Power Failure Mode: Restarts pumping program after a power interruption
- ▶ Audible alarm

MODEL	DESCRIPTION
BS-900	Programmable Peristaltic Pump
BS-900-YG4	1/16" Replacement Head for low volume, higher precision dispensing. Maximum dispense rate is 75 mL/min.

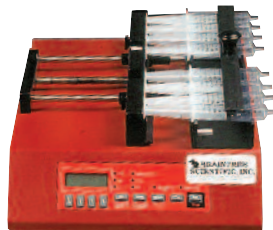


Syringe Pumps

BS-8000 and BS-9000 Programmable Syringe Pumps

Built for Automation

- ▶ Stand-alone or from a computer
- ▶ Infusion and withdrawal. Set a single pumping rate, set a dispensing volume, or program up to 41 pumping phases that change pumping rates, set dispensing volumes, insert pauses, control and respond to external signals, sound the buzzer
- ▶ Create expandable and reconfigurable multi-syringe systems by attaching pumps to each other



General Features:

- ▶ Infuses and withdraws
- ▶ Accepts small syringes or large syringes, up to 60cc
- ▶ Dispense continuously at a fixed pumping rate as low as 6µL/hr or as high as 1200ml/hr
- ▶ Change pumping rate and direction while pumping
- ▶ Selectable rate units: µL/hr, µL/mn, ml/hr, ml/mn
- ▶ Dispense a specified volume
- ▶ Dispense according to a pumping program to:
 - ▶ Pre-program dispense volumes. Each volume can be different
 - ▶ Automatically change pumping rates or pumping direction
 - ▶ Ramp up or down the pumping rate
 - ▶ Timed delays between dispensers
 - ▶ Automatically pause program and wait for user to continue the dispense
 - ▶ Synchronize dispenses with other equipment or pumps to change pumping rates in reaction to a sensor or signals from other pumps
 - ▶ Send logic signals to other equipment. Change pumping rates in reaction to a sensor
- ▶ Program audible alarm to beep at any time to alert operator
- ▶ Enter pumping program from keypad or download from a computer
- ▶ Operates stand-alone, from RS-232 computer port or TTL logic interface
- ▶ Total volume pumped separately accumulated for infusion and withdrawal

Programming Features:

- ▶ 41 programmable phases
- ▶ Set event interrupts from external signals to cause automatic jumps to another part of the program
- ▶ Conditional jumps based on external inputs

Nested Loops:

- ▶ Repeat a section of the program continuously or a set number of times

Program Editing Functions:

- ▶ Insert and delete program phases
- ▶ Simplifies program development and updating
- ▶ Allows quick removal or addition of program phases
- ▶ Enter programs from keypad or computer
- ▶ Download or upload pumping programs from or to a computer. Store dispensing programs in a file, then download to one or more pumps. Specify in file to send a different pumping program of each pump in pump network
- ▶ Automatically change pumping rates
- ▶ Insert timed delays between dispenses

Multi-syringe pump has all programming features of single syringe pump with either 6 or 8 syringes.

MODEL	DESCRIPTION
BS-8000	Holds 1 Syringe up to 60cc
BS-9000-2	Holds 2 Syringes up to 60cc
BS-9000-6	Holds 6 Syringes up to 50cc
BS-9000-8	Holds 8 Syringes up to 10cc
BS-9000-12	Holds 12 Syringes up to 3/5cc

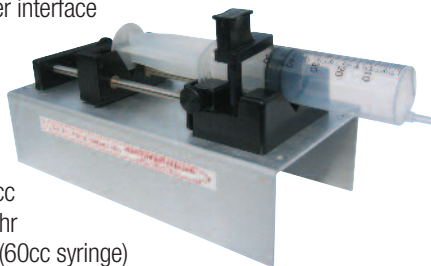
Braintree Scientific has low cost syringe pumps in stock for use in biomedical research laboratories!



BS-500 OEM Application Syringe Pump

Specifically built for automation, this OEM pump operates from a computer

- ▶ Does not have a built-in user interface
- ▶ Chassis mountable:
9.5"L x 4.25"W x 4.125"H
(23.5 x 10.8 x 10.5cm)
- ▶ Operates from a 12V DC power source
- ▶ Holds one syringe up to 60cc
- ▶ Infusion rates from 0.73 μ L/hr (1cc syringe) to 2100ml/hr (60cc syringe)
- ▶ Includes all advanced functions and programming features of BS-8000 family
- ▶ Download free pump terminal emulator
- ▶ Custom modifications to the mechanics and firmware are available
- ▶ Computer controllable: networkable up to 100 pumps



Stand-alone operation: pre-program the pump with a dispensing program, then operate the pump from an attached foot switch, button, or I/O controller. Add the OEM Starter Kit to run as a fully functional, stand-alone pump. Open chassis design easily mounts into your system.

Features include infuse and withdraw, holds syringes 60 cc and below. Set a single pumping rate and/or dispensing volume. Program up to 41 pumping phases that change pumping rates, set dispensing volumes, insert pauses, control and respond to external signals, sound the buzzer. Network, control, and monitor up to 100 pumps from one computer. Dispensing accuracy of $\pm 1\%$. Motor stall detection available in the BS-501 model. Typically used in high pressure applications where there is a risk of exceeding the maximum force specified.

OEM Starter Kit

Allows user to interactively communicate with the pump from a computer.

Foot Switch

Allows user to start, stop, or trigger the next phase on syringe pump. Attach to a BS-500 to allow stand-alone operation. Utilizes TTL logic port on syringe pump.

Higher flow rates available.



MODEL	DESCRIPTION
BS-500	OEM Syringe Pump
BS-501	OEM Syringe Pump with Stahl Detection Includes an optical encoder that will detect and stop the motor during a Stahl
OEM-STARTER	OEM Starter Kit Includes power supply, pump-to-PC network cable and user manual
ADPT-2	Foot Switch



BS-300 "Just Infusion"™ Syringe Pump

Just the features that you want, and none that you don't want to pay for

- ▶ Holds small or big syringes up to 60ml
- ▶ Pump continuously until user stops pump
- ▶ Infusion rate can be changed while pumping
- ▶ Remembers previous settings on power up
- ▶ Power failure mode allows pump to continue pumping after a reset
- ▶ Syringe purge mode
- ▶ Displays total volume dispensed in ml or μ L units
- ▶ Maximum pumping rate of 1500ml/hr with a 60ml syringe
- ▶ Precise reproducible flow rates
- ▶ Selectable infusion rate units: ml/hr, μ L/hr, ml/min, μ L/min
- ▶ **"Infuses only!"**



MODEL	DESCRIPTION
BS-300	"Just Infusion" Syringe Pump™

Programmable Microfluidics Syringe Pump

- ▶ Smoothest microfluidic syringe pump on the market.
Holds 1 syringe up to 60ml
- ▶ Advance per step: 4.252232 nanometers
- ▶ Infusion rates from 0.008nl/hr (0.5ml syringe) to 2545 μ L/min (140ml syringe)
- ▶ Available in double syringe (BS-8004X) version
- ▶ Easy-to-use keypad interface
- ▶ Space saving chassis: foot print size of only 5.75" x 8.75" won't take up unnecessary space on laboratory or production bench
- ▶ Includes all advanced functions and programming features of BS-8000 family
- ▶ Includes X upgrade smooth linear/gradient increasing and decreasing pumping feature

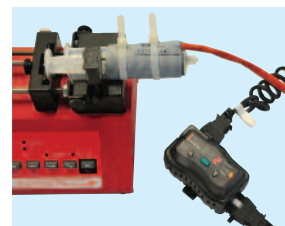


MODEL	DESCRIPTION
BS-8002X	Single Syringe Pump
BS-8004X	Dual Syringe Pump

Syringe Heater

Heating device for syringes that require temperature-controlled dispensing. Heats syringe to over 100°C. Temperature sensor in heating pad. Digitally set heater setpoint, setpoint is retained in memory. Controller will heat syringe and hold set temperature using an on/off or PID control algorithm.

Multiple syringe heater pads can be attached to the control unit. Pump sold separately.

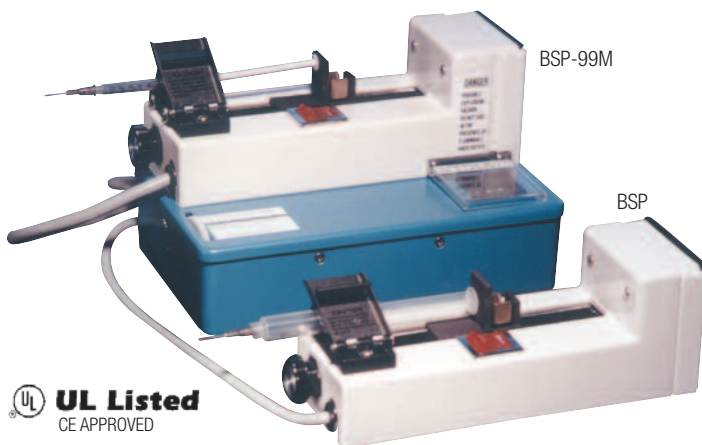


MODEL	DESCRIPTION
BS-SYRH	Syringe Heater Kit includes Control Unit, power cable and Primary Syringe Heater pad
BS-SYRH2	Pad2 Kit for attaching a second heating pad
BS-SYRH3	Pad3+ Kit for adding three or more pads

Temperature sensed in primary heating pad only



Model BSP-99M Multi-Speed



UL Listed
CE APPROVED

Multi-speed pumps infuse for times ranging from 20 minutes to 2 weeks! Model BSP-99M syringe pump has 99 speeds and is designed for use with readily available glass and plastic syringes (up to 50ml).

- ▶ Built in flow chart
- ▶ 99 equally spaced infusion speeds
- ▶ Calibrated sheet providing flow rates for the major brand syringes
- ▶ Automatic shut-off
- ▶ Sound alarm to signal an empty syringe

MODEL	DESCRIPTION
BSP-99M	(0.145 to 140ml/hr)

Micro-Syringe Adapter

Micro-Syringe Adapter is designed to be used in BSP syringe pumps when using syringes of 5ml or smaller. It is possible to insert two micro-syringes into the adapter.

Note: Rates specified obtained with a 50ml syringe

MODEL	DESCRIPTION
BSP-ACC	Micro-Syringe Insert

Model BSP Single-Speed

Single speed pumps provide from 40 minutes to 3 days of continuous infusion with flow rate dependent on syringe size.

Model BSP single speed syringe pump is specifically designed to infuse fluids at an exact and reproducible flow rate from either glass or plastic syringes. Model BSP syringe pumps are equipped with:

- ▶ Automatic shut-off switch (disconnects power at end of syringe)
- ▶ Indicator on light

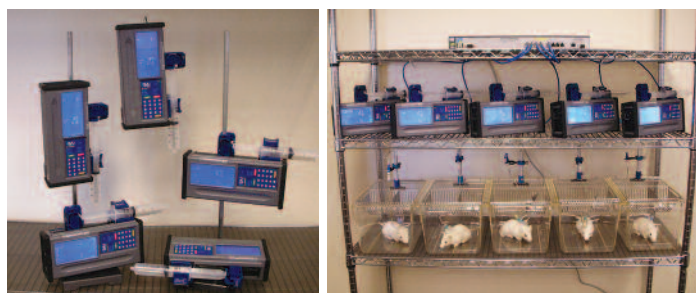
A calibration index is provided for infusion rates with different size syringes.

MODEL	DESCRIPTION
BSP-1	0.01ml/min; duration = 3 days +
BSP-2	0.12ml/min; duration = 6.9 hrs. +
BSP-3	1.21ml/min; duration = 41 minutes +
BSP-4	0.04ml/min; duration = 20 hrs. +
BSP-5	6ml/min; duration = 8 minutes +
BSP-6	36.2ml/min; duration = 1 minutes +

Special order interchangeable motors to achieve different rates.

3D Programmable Pump

SAI model 3D™ infusion pump is the first state-of-the-art syringe driver built specifically for large-scale GLP Toxicology studies. Multiple communication options, wireless and/or Ethernet, provide unparalleled versatility for end user when coupled with the Axios™ infusion management software system. SAI 3D™ provides the most versatile animal room power delivery configuration available. Power 1-48 pumps with one AC cord. Small footprint and multiple mounting position features are designed specifically for space-challenged animal rooms. SAI 3D™ has all the features present in modern medical purpose pumps but will never be discontinued or altered due to irrelevant software changes required in human use pumps.



Unique Features:

- ▶ Small foot print
- ▶ Up to 48 pumps powered by a single AC cord
- ▶ Multiple mounting positions
- ▶ Power over Ethernet; one cord for both power and Ethernet
- ▶ Ethernet and/or wireless communication
- ▶ Syringe recognition
- ▶ Modern medical pump features; no threat of discontinuation due to "medical" requirements
- ▶ Repair and calibration kits available for complete "in-house" support

Unique Benefits:

- ▶ More pumps per room
- ▶ Less cords per room
- ▶ Multiple mounting options
- ▶ Communication flexibility
- ▶ Reduces maintenance and repair down time
- ▶ Designed by toxicologists for toxicologists

Specifications:

Accuracy: +/- 3%

Flow Rates: 0.01 to 438 ml/hr

Power: 110 or 220V, internal battery back-up, battery capacity 24 hours

Compatible Syringes: B-D, Terumo, Monoject

Alarms/Alerts: Low volume, syringe empty, occlusion, low battery, incorrect syringe, dose due, pump idle, syringe mounted improperly, multiple failsafe system alerts

MODEL	DESCRIPTION
SAI-3D	3D Programmable Pump



Small Animal Anesthesia Systems that evolve with your needs

Safe, easy-to-use anesthesia systems for small animals

E-Z Anesthesia customizes systems to integrate seamlessly with your existing equipment. These systems can be customized to satisfy your current needs while providing the flexibility to expand and meet future requirements.

An innovative solution that offers the ultimate in user-friendly, simple operation with a level of precise automation that minimizes operator error. Each system incorporates a breathing valve that controls gas flow to the nosecone and protects both animals and technicians from overexposure to gas. Switching from working with mice to rats is as easy as changing a nosecone.

Most E-Z systems are expandable to accommodate up to four breathers. The system is adaptable to a wide range of procedures from Stereotaxic, MRI, X-Ray, PET, simply by interchanging a breather.

Single Animal System



Single Animal System is designed as an economical alternative when a simple, entry-level system is sufficient.

Accommodates animals ranging in size from neonate mice to rabbits. Designed for treatment of one animal at a time. Y-splitter valve directs anesthetic output to either induction chamber or breathing circuit. Oxygen flush purges induction chamber before removing animal. Carry handle facilitates safe, easy transport of unit.

System includes:

- ▶ EZ-108SA Single animal vaporizer unit
- ▶ EZ-103A Microflex mouse/rat non-rebreathing device plus 2 plastic surgery beds
- ▶ EZ-178 mouse/rat Sure-Seal induction chamber
- ▶ EZ-258 charcoal filters (8)
- ▶ EZ-320 oxygen regulator for 'H' tanks
- ▶ Mouse/rat nosecones, nosecone plugs and all connecting tubes

MODEL	DESCRIPTION
EZ-SA800	Single Animal System

Classic Small Animal System



Classic Starter System

Includes core EZ Anesthesia components without heating system. Heating components may be added to the system as needed.

Featuring the Microflex Breather

Low profile breather is suitable for work under microscopes and other applications where a smaller breather is required. Also available in plastic for MRI use.

System includes:

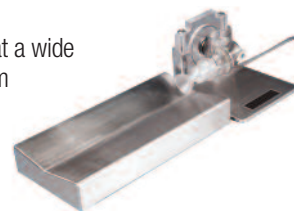
- ▶ EZ-150C Classic vaporizer unit
- ▶ (2) EZ-103A Microflex mouse/rat non-rebreathing devices plus (2) plastic surgery beds per breather
- ▶ EZ-178 Mouse/Rat Sure-Seal Induction Chamber
- ▶ EZ-258 charcoal filters (8)
- ▶ O₂ regulator - specify which oxygen regulator is required: EZ-320 industrial CGA540, EZ-330 medical yoke fitting
- ▶ Mouse/rat nosecones, nosecone plugs and all connecting tubes

MODEL	DESCRIPTION
EZ-7000	Small Animal Anesthesia System no heat
For heated version see Microflex Small Animal System	

Versaflex Small Animal System

Featuring the Versaflex Breather

Versaflex breather offers the flexibility to treat a wide range of animals - neonates up to 5 kilogram rabbits. Breather is supplied with three nosecone sizes - customized for mice, rats, rabbits and guinea pigs. Tight fitting nosecones eliminate gas leakage and protect personnel from gas exposure. Includes heating elements for maintaining animal temperature during procedures.



System includes:

- ▶ EZ-150C Classic vaporizer unit
- ▶ EZ-104 Versaflex non-rebreathing unit
- ▶ EZ-1785 Large Mouse/Rat Sure-Seal Induction Chamber
- ▶ EZ-211 Mouse/Rat stainless steel heated surgical waterbed (10"L x 6"W x 1.5"H)
- ▶ EZ-163 Induction chamber warmer
- ▶ EZ-200 Water heating circulation pump
- ▶ EZ-258 Charcoal filters (8)
- ▶ O₂ Regulator - specify which Oxygen Regulator is required: EZ-320 industrial CGA540, EZ-330 medical yoke fitting
- ▶ Mouse/rat and rabbit/guinea pig nosecones, nosecone plugs and all connecting tubes

MODEL	DESCRIPTION
EZ-7150	Versaflex Small Animal Anesthesia System



Microflex Small Animal System

Featuring the Microflex Breather



This low profile breather is suitable for work under microscopes and other applications where a smaller breather is required. Also available in composite plastic for MRI use. Breather is supplied with two nosecone sizes - customized for mice, rats and other animals weighing up to 500 grams. Tight

fitting nosecones eliminate gas leakage and protect personnel from gas exposure. Includes heating elements for maintaining animal temperature during procedures.

System includes:

- ▶ EZ-150C Classic vaporizer unit
- ▶ (2) EZ-103 Microflex mouse/rat non-rebreathing unit
- ▶ EZ-178 Mouse/Rat sure-seal induction chamber
- ▶ (2) EZ-211 Mouse/Rat thin-line stainless steel heated surgical waterbed (10"L x 3.5"W x 1"H)
- ▶ EZ-163 Induction chamber warmer
- ▶ EZ-200 Water heating circulation pump
- ▶ EZ-258 Charcoal filters (8)
- ▶ O₂ Regulator - specify which Oxygen Regulator is required: EZ-320 industrial CGA540, EZ-330 medical yoke fitting
- ▶ Mouse/rat nosecones, nosecone plugs and all connecting tubes

MODEL	DESCRIPTION
EZ-7200	Microflex Small Animal System

Multi-Animal System

Featuring the Multi-Animal Breather for use with x-ray, MRI and PET imaging equipment

Breather incorporates five ports that can accommodate five mice or three rats simultaneously from a single gas line. Custom breathers can also be made to integrate with existing equipment. Breather is supplied

with five mouse nosecones and three rat nosecones. Tight fitting nosecones eliminate gas leakage and protect personnel from gas exposure.



System includes:

- ▶ EZ-150C Classic vaporizer unit
- ▶ EZ-109 Multi-animal non-rebreathing unit
- ▶ EZ-178 Mouse/rat sure-seal induction chamber
- ▶ EZ-258 Charcoal filters (8)
- ▶ O₂ Regulator - specify which oxygen regulator is required: EZ-320 industrial CGA540, EZ-330 medical yoke fitting
- ▶ Mouse/rat nosecones, nosecone plugs and all connecting tubes

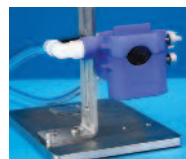
Multi-Animal System with heat includes everything above plus:

- ▶ EZ-163 Induction chamber warmer
- ▶ EZ-200 Water heating circulation pump

MODEL	DESCRIPTION
EZ-7109	Multi- Animal Anesthesia System no heat
EZ-7350	Multi-Animal Anesthesia System with heat

Stereotaxic Small Animal System

Featuring the Rat Stereotaxic Breather



Breather is specifically designed for use with rats. Integrates easily with standard stereotaxic equipment. Incorporates adjustable nose bridge, lower jaw support and ear bars. Includes heating elements for maintaining animal temperature during procedures.

System includes:

- ▶ EZ-150C Classic vaporizer unit
- ▶ EZ-107 Rat stereotaxic non-rebreathing unit
- ▶ EZ-178 Mouse/Rat Sure-Seal induction chamber
- ▶ EZ-211 Mouse/Rat Thin-Line stainless steel heated surgical waterbed (10"L x 3.5"W x 1"H)
- ▶ EZ-163 Induction chamber warmer
- ▶ EZ-200 Water heating circulation pump
- ▶ EZ-258 Charcoal filters (8)
- ▶ O₂ Regulator - specify which Oxygen Regulator is required: EZ-320 industrial CGA540, EZ-330 medical yoke fitting
- ▶ Mouse/Rat nosecones, nosecone plugs and all connecting tubes

MODEL	DESCRIPTION
EZ-7400	Stereotaxic Small Animal System

EZ-AF9000 Auto Flow System



Precise, consistent, preset flow rate from each outlet, no variables. E-Z Auto Flow System offers highly efficient, precise gas flow that is easy to use.

- ▶ Fixed flow rates are set specifically for mice and rats
- ▶ Each output is individually controlled with simple on/off switch
- ▶ Five outputs supply anesthesia to the induction chamber and up to four breathers
- ▶ Preset flow rates eliminate need for flowmeters and manual adjustments
- ▶ Protocols are easily followed without calculations
- ▶ Flow rate is not impacted by the accessories connected
- ▶ Precise, low flow gas saves money and protects personnel
- ▶ Pushbutton oxygen flush purges induction chamber before removing animals

System includes:

- ▶ EZ-190F Auto-flow vaporizer unit
- ▶ (2) EZ-103A Microflex mouse/rat non-rebreathing devices plus (2) plastic surgery beds per breather
- ▶ EZ-178 Mouse/Rat sure-seal induction chamber
- ▶ EZ-258 Charcoal filters (8)
- ▶ O₂ Regulator - specify which oxygen regulator is required: EZ-320 industrial CGA540, EZ-330 medical yoke fitting
- ▶ Mouse/Rat nosecones, Nosecone plugs and all connecting tubes.

MODEL	DESCRIPTION
EZ-AF9000	Auto Flow System



Anesthesia WorkStation



Compact (9" W x 9" D x 15" H), convenient system for use on animals under 7 kg (15 lb). In clinical trials the AWS is being used for long term anesthetic procedures on 150-400gm rodents. AWS has been shown to be effective with induction, stabilization, and maintenance of patients for neurophysiological testing using inhalant anesthetics for daily 8- to 12-hour procedures. Using the AWS, rats under isoflurane anesthesia have been subject to extended electrophysiological recordings of cortical responses. Throughout these procedures AWS has been shown to

facilitate administration of anesthetics, holding the subject in a very smooth, controllable anesthetic plane, as well as providing precise respiratory control.

Hallowell EMC Anesthesia WorkStation is easy to use as *both* a basic respirator (irrespective of anesthetic regime) and delivery source for inhalant anesthetics. It incorporates a time-cycled volume ventilator with an adjustable pressure safety limit. The only additional component necessary for immediate utilization is a vaporizer for the agent of your choice.

Frees user from the restraints of the operating room to work on bench top when appropriate.

MODEL	DESCRIPTION
AWS	Anesthesia Workstation

ReFresh™ Anesthetic Waste Gas Canister

Save time and money

Refresh Canisters last twice as long, capture twice the amount of Isoflurane with less waste and increased safety. With a decrease in canister changeovers there is potential for cost savings up to 40%.



MODEL	DESCRIPTION
EZ-258	ReFresh™ Gas Canister - case of 8

F/AIR Canister



A sensible answer to anesthesia gas problems in the operating room, the F/AIR anesthesia gas filter was specifically designed to remove waste anesthesia gases from the operating room environment. Economical to use, with an average useful life of 12 to 15 hours, F/AIR is easily adaptable to anesthesia machines. F/AIR can remove no less than 50 grams of pure halogenated anesthetic gases and can then be conveniently discarded.

MODEL	DESCRIPTION
F-AIR	F/Air Canister
F-AIR-CS	F/Air Canister - case of 8
F-AIR-KIT	F/Air Kit - Includes holder, scavenger tube and one canister

Vertical Canister Holder



Vertical canister holder ensures proper canister position. A canister on its side will allow waste gases to travel across the top, limiting its effectiveness, while a canister on a table will block waste gases from exiting. Vertical canister holder accepts any canister 3" dia. or smaller. Model FC-A is included and connects standard 1/4" tubing to the canister.

The vertical holder is for passive systems only and can be tabletop or wall mountable

MODEL	DESCRIPTION
CHU-FC	Vertical canister holder, wall mountable (FC-A included)
CHU-1	Vertical canister holder, wall mountable (FC-A not included)
FC-A	90 Degree Adapter

Vacuum Control Station



Vacuum control station is designed to regulate a vacuum source while scrubbing scavenged waste anesthetic gases before re-entering the atmosphere. Vacuum control station comes complete with 0-5 lpm flowmeter, F/AIR canister holder, 2, 90-degree adapters for canister, 15' medical grade white tubing, and both DISS 1/4" hose barb connectors for vacuum source. Tabletop or wall mountable.

Charcoal canisters not included.

Specifications:

Size: 9"L x 6"W x 11"H

MODEL	DESCRIPTION
VCS-01	Vacuum Control Station

Vacuum Pump

- ▶ Convenient, quick and simple to use due to the top mounted power switch
- ▶ Whisper quiet and very low vibration
- ▶ Requires minimal bench top space
- ▶ Maintenance-free drive system and proven long diaphragm life
- ▶ Ultimate vacuum (abs.) mbar/torr 100/75
- ▶ Sized: 9.75"L x 4.75"W x 5.75"H



ME 1 diaphragm pump offers a compact, high performance and easy-to-use solution that is perfect for a necessary vacuum source. Functional, space saving and innovative design with visible top mounted power switch ensures convenient and quick operation for day-to-day lab work. PTFE diaphragm and valves are rugged and provide high chemical resistance.

MODEL	CONFIGURATION
ME-1	Vacuum Pump 120V



Stereodraft

Stereodraft (patent pending) is the first heated surgical table with bi-level vacuum designed specifically for standard stereotaxic frames using gas anesthesia. Bi-level vacuum, independent studies show the Stereodraft exceeds OSHA's requirements, will remove escaped gases from atmosphere ensuring operator safety while maintaining proper animal temperature. Made of durable plastic that can withstand temperature up to 140°F.

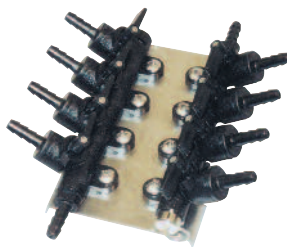
Stereodraft includes: Connected water tubing and two types of connectors for either a Gaymar/Stryker or Colder connector heat pump, 90°F, luer lock quick disconnect and T adapters, three adhesive backed velcro tubing holders, 10' medical grade white tubing.



MODEL	DESCRIPTION
SD-M-01	Stereodraft, mouse 3.5"W x 6"L x .75"H
SD-R-01	Stereodraft, rat 3.5"W x 10"L x .75"H

Manifold

Manifold supports multiple procedures while utilizing only one vaporizer. While offering individual shut-offs, manifold provides intake of new gas to designated locations while opposite side provides output for used gases to a scavenger unit. Accepts 1/4" - 3/8" tubing.



MODEL	DESCRIPTION
MAN-2	2 Station Manifold
MAN-3	3 Station Manifold
MAN-4	4 Station Manifold

One Directional Manifold



One directional manifold works like traditional two directional manifold but allows placement versatility. One directional manifold can be used to deliver fresh anesthetic gases or collect waste anesthetic gases (WAG). Gray standard, white recommended for WAG. Accepts 1/4" - 3/8" tubing. 7' clear tubing with gray plate or 7' white tubing with white plate included

MODEL	CONFIGURATION
M1-2	One directional manifold for 2 anesthetic devices, gray
M1-3	One directional manifold for 3 anesthetic devices, gray
M1-4	One directional manifold for 4 anesthetic devices, gray
M1-P	One directional manifold plate with feet only, gray

Add W at end of model number for white plate. Example: M1-2W would be a one directional manifold for 2 anesthetic devices with white plate.

Coaxial Breathing Apparatus

COAX-4 (made from durable Delrin) is a co-axial anesthesia breathing apparatus for maintaining the surgical plane that can be used for mouse to rat sized animals. Fresh anesthetic gas enters side barbed fitting set with 1/16" tubing that limits dead space. Waste Anesthetic Gas (WAG) is scavenged by end barbed fitting to the WAG site. Masks (two included) utilize a replaceable and transparent silicone diaphragm to seal nose. Accepts standard 1/4" tubing. Ten feet of silicone tubing is included.



MODEL	DESCRIPTION
COAX-4M	COAX-4 with 2 mouse sized masks
COAX-4R	COAX-4 with 2 rat sized masks
COAX-4MR	COAX-4 with 2 mouse and 2 rat sized masks
VM-33-S	Replacement transparent silicone diaphragms (7/cs)
COAX-4M2M	2 mouse sized masks only
COAX-4R2R	2 rat sized masks only

Rodent Anesthesia Face Mask Kit

- Fits mice and rats of all sizes, anatomically correct fit
- Zero leakage or dead space
- Gas flow range of 200 up to 1000cc/min
- Easy to customize
- Versatile for a wide variety of applications
- Quick change between masks
- Access eyes and head of the rodent while sealing nose and mouth
- Reinforced stress points for increased durability
- Mask provides stability of animal for examinations and surgery
- Can be easily incorporated in existing examination procedures
- Waste-line connects to gravity or vacuum filters
- Swiveling ports for greater flexibility in positions
- Adaptable to stereotaxic systems
- Pre-heat air with heating pad



Kit includes:

- Two 6' tubing
- Two 1/4" adapters
- Two 3/8" adapters

MODEL	DESCRIPTION
XENO-CO-KIT	Complete Rodent Face Mask Kit includes small, medium, large and extra large face masks
XENO-MI-KIT	Mouse Face Mask Kit includes small and medium face masks
XENO-LR-KIT	Rat Face Mask Kit includes large and extra large face masks

Individual Face Mask Kit

XENO-S	Small Face Mask Kit mask fits a less than 2 month old mouse Weight: 1.5g to 15g Mask measures: 8mm aperture x 25mm overall length
XENO-M	Medium Face Mask Kit mask fits 2 months and older mouse or a small rat Weight: Mouse - 15g to 26g, Rat - 3g to 20g Mask measures: 10mm aperture x 30mm overall length
XENO-L	Large Face Mask Kit Weight: Mouse - 26g and greater, Rat - 20g to 250g Mask measures: 13mm aperture x 35mm overall length
XENO-XL	Extra Large Face Mask Kit Weight: Rat - 250g to 750g Mask measures: 18mm aperture x 42mm overall length



Single Animal Vaporizer Unit



An economical choice for single animal treatment.

MODEL	DESCRIPTION
EZ-108SA	Single Animal Vaporizer Unit

Classic Vaporizer Unit



Unit incorporates a manual five-output manifold that includes a new flowmeter configuration that improves upon the original E-Z Anesthesia design.

MODEL	DESCRIPTION
EZ-150C	Classic Vaporizer Unit

Auto Flow Vaporizer Unit



Featuring an automatic five-output manifold that does not require flowmeters.

MODEL	DESCRIPTION
EZ-190AF	Auto Flow Vaporizer Unit

Vaporizers

Calibrated 0.25 to 5% using a laser refractometer for the specified anesthetic drug. Complete with safety lock to help prevent accidental turn-on of dial. Fluctuations in temperature, flow rate and duration of use is automatically compensated for during use. When used with I.P.P.V. the variation in output is negligible.

Other drug type vaporizers available for Halothane, Sevoflurane, Enflurane, call for pricing. Drug not included.



MODEL	DESCRIPTION
VP-I	Cage Mounting/Well Fill, Isoflurane

CO₂ Chamber

The cleanest CO₂ induction chamber on the market!



- ▶ For mice and rats
- ▶ Simple, quick and easy to use!
- ▶ Small foot print – 9" diameter, easy to keep on bench
- ▶ Quick connect with valve – closes when disconnected, keeps CO₂ in tube and chamber
- ▶ Door allows user to place animals in chamber without losing CO₂. Provides for ultra quick animal induction
- ▶ 7' tube – easily connects to CO₂ source
- ▶ Disposable bag liner – animal feces and urine remain in bag with animal Chamber is always clean
- ▶ Delivery tube within chamber – fills chamber from bottom, decrease induction time, "more humane"
- ▶ Clear acrylic top – easy to see animals in chamber
- ▶ Solid sides – prevents viewing of animals during the process
- ▶ Includes see thru acrylic lid with door and quick connect with valve, 7' tubing, 50 disposable insert bags

MODEL	DESCRIPTION
COIC	CO ₂ Chamber
COBL	Disposable Liner Bags (50 bags/pk)

Induction Chamber



Clear, durable, acrylic constructed induction chamber. Fresh anesthetic gas from vaporizer or manifold enters a barbed fitting and is directed to the bottom of chamber. Scavenged gas exits the opposite fitting to waste gas

site. Routed top ensures perfect fit. No corners facilitate easy proper cleaning. Stainless steel false floor and 10' blue tubing provided. Accepts tubing from 0.25" - 0.375" inner dimension.

MODEL	DESCRIPTION
IC6X4	Small Induction Chamber Inner Dimensions: 5.25"W x 3.5"H • Overall Dimensions: 7"W x 7"H
IC8X8	Large Induction Chamber Inner Dimensions: 7.5"W x 8"H • Overall Dimensions: 10"W x 10"H



Gas Anesthetizing Box

For use with rodents

The 0.25" thick transparent plastic anesthetizing box allows for constant observation while anesthetizing. Helps protect against accidental overdosing

For use with rats and mice. Easy to move machine tooled sliding top.

Made of durable plastic, this box should last for years.

Not for use with liquid organic solvents.



MODEL	DESCRIPTION
AB-1	Small Box 10"L x 4"W x 4"H (25.4cm L x 10.16cm W x 10.16cm H)
AB-2	Large Box 10"L x 8"W x 8"H (25.4cm L x 20.3cm W x 20.3cm H)

Additional sizes are available, please call for a quote

Pureline® OC4000

This revolutionary Pureline® OC4000 O₂ concentrator provides on-demand oxygen to any existing anesthesia system. While similar machines have been in use in Europe for years, Scivena Scientific has perfected the technology, added safety features, and now is making this money-saving equipment available in the USA. The Pureline® OC4000 O₂ Concentrator is FDA approved, UL tested, and backed by a three year warranty.

- ▶ Ready for use with existing anesthesia equipment
- ▶ Extracts FDA-approved USP 93% pure O₂ from the air and delivers on demand-up to 5 LPM
- ▶ Uses industry standard DISS male thread connection
- ▶ Includes 10' of high pressure O₂ hose with female DISS end fittings
- ▶ FDA approved, UL tested
- ▶ Oxygen purity and flow safety alarms
- ▶ Quiet 40-dBA operation
- ▶ Made in USA, state-of-the-art manufacturing with ISO quality and TUV SUV safety certifications



Specifications:

Dimensions: 14" x 9" x 23"

Electrical Power Supply: Rating: 115/230V 60Hz
Average Power: 330W(avg)
Protection Class: Class II
Mains Protection: 5A

Coarse cabinet filter should be cleaned as needed in your environment. (Part number OC4000-1)

Change fine intake filters during yearly anesthesia service call or every two years. (Part number OC4000-2)

MODEL	DESCRIPTION
OC4000	Pureline OC4000
OC4000-1	Coarse Cabinet Filter
OC4000-2	Fine Intake Filter

Pureline® OC6000 Oxygen Concentrator with E-tank Back-Up

Works with any existing anesthesia system!

Pureline® OC6000 provides

on-demand oxygen to any existing anesthesia system. Built in E-tank manifold allows mobile use of the machine without power and protects your subject in case of power failure. Pureline® OC6000 O₂ Concentrator is FDA approved, UL tested and includes three year warranty

- ▶ Ready for use with existing anesthesia equipment
- ▶ Complete oxygen concentrator, frame and valve assembly
- ▶ Extracts medical grade oxygen (USP 93%) from the air and delivers on demand-up to 5 LPM
- ▶ Uses industry standard DISS male thread connection
- ▶ Safety back-up oxygen supply (standard E tank) with fully integrated O₂ flush with industry standard 30 LPM maximum flow
- ▶ Ability to use oxygen flush with simple built in switch
- ▶ Oxygen purity and flow safety alarms
- ▶ Quiet 40-dBA operation
- ▶ Made in USA, state-of-the-art manufacturing with ISO quality and TUV SUV safety certifications
- ▶ Sturdy A-frame base with compact 18" square footprint



Specifications:

Footprint: 18" x 18"

Shipping Box Dimensions: Concentrator - 19" x 14" x 27"
Frame - 36" x 23" x 27"

Shipping Weights: Concentrator - 38lbs.
Frame - 55lbs.

MODEL	DESCRIPTION
OC6000	Pureline OC6000

EZ-R20C Oxygen Concentrator

Eliminates the need for oxygen tanks or an in-house oxygen source.

- ▶ Extracts nitrogen from room air, outputs oxygen at 90% minimum purity
- ▶ Saves money in oxygen costs
- ▶ Eliminates labor costs and inconvenience of tank changes
- ▶ Quiet operation at 49-dBA
- ▶ Easy portability with rollerbase design
- ▶ Maximum output flow rate of up to 8LPM and fixed pressure of 20psi
- ▶ Weight is manageable at 54 lbs
- ▶ Able to supply oxygen to multiple systems simultaneously
- ▶ Well-suited for use in barrier facilities



MODEL	DESCRIPTION
EZ-R02C	Oxygen Concentrator



Oxygen Regulators



EZ-320



EZ-330

MODEL	DESCRIPTION
EZ-320	Oxygen Regulator with H-Cylinder fitting (preset at 50 psi)
EZ-330	Oxygen Regulator with E-Cylinder fitting (preset at 50 psi)

Tamper-Proof Dual Flow Regulator

Compliant with AVMA Guidelines

- ▶ Factory preset to your specific cage size
- ▶ Easy operation with simple on/off valve
- ▶ 0.5 to 12 liter per minute (LPM) range
- ▶ Visual indicator ensures correct gas flow
- ▶ Simultaneously operate two different size cages
- ▶ Connects directly to CO₂ cylinder with CGA-320 fitting
- ▶ Includes two 6' hoses with quick disconnect fitting



MODEL	DESCRIPTION
EP-3300	Tamper-Proof Dual Flow Regulator

Low Pressure Regulator with Flowmeter

0.5-12 LPM

AVMA compliant. Precise control of CO₂ flow. Calibrated specifically for CO₂ gas. 0.5-12 LPM range. Connects directly to CO₂ cylinder with CGA-320 fitting. Optional CGA-970 yoke fitting available. Includes a six foot hose with quick-disconnect fitting that attaches to stainless steel lids.



MODEL	DESCRIPTION
EP-1305	Low Pressure Regulator with Flowmeter

Adjustable Flow Meter

Compliant with AVMA Guidelines

- ▶ 0.5 - 12 LPM
- ▶ Manually adjust flow rate for cage size
- ▶ Connects directly to house gas source with standard CO₂ DISS 1080 female connection (other connections available upon request)
- ▶ Includes 6' hose with quick disconnect fitting



MODEL	DESCRIPTION
EP-5000	EP-5000 Adjustable Flow Meter with DISS
EP-5000-BR	EP-5000-BR Adjustable Flow Meter with Bracket bolts directly to wall

Tamper-Proof CO₂ Flow Meter

Compliant with AVMA Guidelines

- ▶ Factory preset to your specifications
- ▶ Easy operation with simple on/off valve
- ▶ 0.5 to 12 liter per minute (LPM) range
- ▶ Visual indicator ensures correct gas flow
- ▶ Tamper-proof cap
- ▶ Includes 6' hose with quick disconnect fitting
- ▶ EP-6000-BR Includes bracket for ease of installation, bolts directly to wall

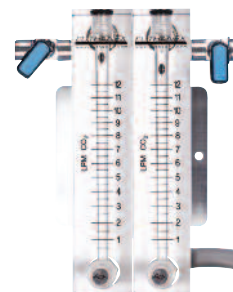


MODEL	DESCRIPTION
EP-6000	Tamper-Proof Flow Meter with DISS
EP-6000-BR	Tamper-Proof Flow Meter with wall bracket

Tamper-Proof Dual CO₂ Flow Meter

Compliant with AVMA Guidelines

- ▶ Factory preset to your specific cage size
- ▶ Easy operation with simple on/off valve
- ▶ 0.5 to 12 liter per minute (LPM) range
- ▶ Visual indicator ensures correct gas flow
- ▶ Tamper-proof flow adjustment
- ▶ Includes 6' hose with quick disconnect fitting
- ▶ Simultaneously operate two different size cages



MODEL	DESCRIPTION
EP-7000-BR	Tamper-Proof Dual Flow Meter with bracket

Adjustable Tabletop Flow Meter

Compliant with AVMA Guidelines

- ▶ 0.5 - 12 LPM
- ▶ Adjustable flow rate for different cage sizes
- ▶ Tabletop stand for easy placement
- ▶ Includes two 6' hoses with quick disconnect fitting



To determine AVMA compliant flow rates, use the equation below:

$$\frac{\text{Height (in)} \times \text{Width (in)} \times \text{Length (in)}}{61} = \text{Liters} \times 20\% = \text{flow rate}$$

The 2013 AVMA Euthanasia Guidelines recommend 10 - 30% fill rate.

MODEL	DESCRIPTION
EP-1500	Adjustable Tabletop CO ₂ Flow Meter



New! Tank Talker Wireless Tank Monitor System



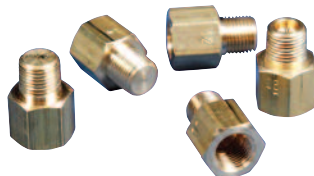
Tank not included

Avoid gas shortages and IACUC guideline violations with the Euthanex Tank Talker. Tank Talker is a wireless monitor for single tank or tank farms. Tank Talkers work with any gas cylinder and integrates with the SMARTBOX® Touch Screen Systems. Fully adjustable alarm settings connects to wifi for email alert notifying user of the location and remaining pressure. Remotely access your tank levels. Visual and audio alarm displayed on 7" monitor/touch screen (works in conjunction with SMARTBOX Touch Screen controllers). Will adapt to existing regulators (regulator not included), 1/4" NPT thread. Monitors two gas sources simultaneously.

MODEL	DESCRIPTION
EA-350	Tank Talker Wireless Tank Monitor System

Flow Restrictor

When used with a Euthanex lid, avoids need to adjust flow rate due to a change in cage number. For use with any size Euthanex lid between lid and lid stem.

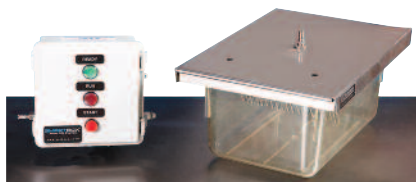


MODEL	DESCRIPTION
FR-SA	Flow Restrictor

SMARTBOX® Lab Control Unit

Compliant with AVMA Guidelines

Controller automates on/off gas flow at the push of a button, delivering CO₂ to individual cage or Euthanex lid. Designed for small scale use. Operates at a fixed flow rate based on the external CO₂ source. Lids and chambers sold separately.



- Treats animals at individual cage level
- Designed for investigators that need to retrieve animals quickly
- Utilizes full range of Euthanex cage lids or existing induction chamber
- Minimizes operator error and excessive gas use
- Automatic shut-off saves gas and protects personnel
- Easily attaches to wall

MODEL	DESCRIPTION
EA-31000	1 Programmable timing preset and 1 Gas Output
EA-32000	2 Programmable timing presets and 1 Gas Output
EA-34000	4 Programmable Timing Presets and 4 Gas Outputs includes: four EA-1130 lab unit hoses
EA-32002	2 Programmable Timing Presets and Individual Start Times, 2 Gas Outputs, includes: two EA-1130 lab unit hoses
EA-34004	4 Programmable Timing Presets and Individual Start Times includes: four EA-1130 lab unit hoses

SMARTBOX® Prodigy

- Touch screen control displays flow, cage type, stage, and times
- Automatically calculates your cage type/total volume
- Automatically controls flow rates
- Administrator can set cage flow rate and times for each cage type
- Treats animals at individual cage level
- Euthanize up to 3 cages at a time
- Secondary charge and dwell for neonates
- Unlimited amount of users with password protection
- Allows user-level permissions
- Users can only access their permitted cage types
- Designed for investigators that need to retrieve animals quickly



SMARTBOX Prodigy from Euthanex surpasses the competition by allowing administrators to program an unlimited number of cages and sizes. Administrator only needs to select flow rate percentage. EA-33000TS will automatically calculate the required flow rate. An unlimited number of password-protected users adds even more flexibility. Each user can only see cages authorized by administrator. User can connect up to 3 cages at one time. Touch screen display shows the cycle, cycle time, and total time remaining.

MODEL	DESCRIPTION
EA-3300TS	SMARTBOX Prodigy

Euthanex Lids



E-20029



E-20027

Euthanex Lid system has become an industry standard. Simply by removing the water bottle from the wire cage cover and placing Euthanex Lid over the host cage, user is ready to perform euthanasia. Eliminates the need to transfer animals.

Lids are available in a variety of sizes to accommodate virtually all-plastic cage sizes designed for small lab animals. Heavy-duty stainless steel lids have a stem for easy connections to the regulator hose. A foam lid gasket assures a good seal. Multiple lids may be used to treat several cages at once.

MODEL	DESCRIPTION
E-20027	Super Small Lid (13" x 9") - Stainless Steel
E-20028	Small Lid (16" x 10") - Stainless Steel
E-20030	Square Lid (13" x 13") - Stainless Steel
E-20032	Medium Lid (20.5" x 11") - Stainless Steel
E-20033	High Density Mouse Lid (13" x 17") - Stainless Steel
E-20034	Large Lid (23" x 16.5") - Stainless Steel
E-20029	Lid Storage Bracket - Wall mounted bracket holds up to four lids
E-20035	Thoren Rat Lid (24" x 12.5")
E-20039	Opti Mouse Lid
E-20040	Opti Rat Lid
EP-1130	6' Hose with quick disconnect



Quietek™

Automated euthanization device ensures AVMA compliance



Cage and cover sold separately

Cage sold separately

Ensure that laboratory rodents are humanely euthanized without disrupting laboratory workflow. Quietek is an affordable, fully-automated device specifically designed to comply with 2013 AVMA guidelines

- **Adheres to stringent new guidelines** - The 2013 AVMA Guidelines for Euthanasia of Animals state that flow rate for lab rodent CO₂ euthanasia systems should displace 10% to 30% of chamber or cage volume/minute. NIH requires all new research plans and renewals be evaluated using these guidelines.
- **Takes the guesswork out of euthanasia** - Designed by animal research facility managers and scientists, easy to use, accurate system ensures that users correctly administer CO₂ by automatically calculating gas delivery for cage volume and desired fill rate. CO₂ conditions will be consistent every time, thereby eliminating a source of variation.
- **Fail-safe and easy to operate** - Simply push start. There are no valves to turn (or accidentally leave open) between runs and no regulators to adjust. Quietek also features a key lock that prevents unwanted or accidental tampering with settings.
- **Reduces impact on lab** - Quietek seamlessly integrates into current protocols. Use it with most common chambers or cages. Lids are available in several sizes.
- **Works on wide range of chamber sizes** - models are available for chamber sizes as small as 0.5L to as large as 200L providing flow rates from 0.05 LPM to 60 LPM.

MODEL	DESCRIPTION
QTK-1	Quietek 1 Carbon Dioxide delivery system Single port system will deliver CO ₂ to a 3-30L rodent cage
QTK-2	Quietek 2 Carbon Dioxide delivery system Dual port system will deliver CO ₂ to 2 separate 3-30L rodent cages
QTK-SC	Single port system will deliver CO ₂ to a 0.5-10L chamber
QTK-SCT	QTK-SC with RapidFill option for fastest results
QTK-XL	Single port system will deliver CO ₂ to a 30-200L chamber
QCVR-13x9	Cage Lid - Small rodent cage lid for use with Quietek system. 13" x 9"
QCVR-16x11	Cage Lid - Medium rodent cage lid for use with Quietek system. 16" x 11"
QCVR-18x14	Cage Lid - Medium/wide rodent cage lid for use with Quietek system. 18" x 14"
QCVR-21x11	Cage Lid - Medium/large rodent cage lid for use with Quietek system. 21" x 11"
QCVR-24x17	Cage Lid - Large rodent cage lid for use with Quietek system. 24" x 17"
QT6-B	Quietek Tubing 6 feet of tubing to connect Quietek to a cage lid. Comes with a quick connect fitting. Blue hose

CO₂ Flowmeter

Compliance made easy

- Calibrated to accurately deliver CO₂ to chamber
- Easy to connect to any chamber
- Small profile
- Three-way ball valve offers quick chamber fill when needed
- Easy to set CO₂ flowrate
- Wall mount option

2013 AVMA Guidelines for CO₂ Euthanasia

"General recommendations— carbon dioxide is acceptable... using a gradual fill method is less likely to cause pain due to nociceptor activation by carbonic acid prior to onset of unconsciousness; a displacement rate from 10% to 30% of the chamber volume/min is recommended... The practice of immersion, where conscious animals are placed directly into a container prefilled with 100% CO₂, is unacceptable."

Which CO₂ flowmeter to use?

Calculate the total volume of your chamber in cubic inches (in³). Your chamber volume should fall between the min and max of the selected CO₂ flowmeter for the selected chamber displacement rate.

CO ₂ FLOWMETER MODEL/RANGE	CHAMBER VOLUME (in ³)	CHAMBER DISPLACEMENT RATE 10%	CHAMBER DISPLACEMENT RATE 20%	CHAMBER DISPLACEMENT RATE 30%
XL900	max	15,156	7,500	5,040
3 - 25 l/min	min	1,838	925	612
LC500	max	6,120	3,022	2,012
1 - 10 l/min	min	598	290	210
SC100	max	3,060	1,537	1,001
0.5 - 5 l/min	min	315	150	96

Example Calculations for 20% Chamber Vol/min

Large Rat Cage

$$19" \times 10" \times 8" = 1520 \text{ in}^3$$

$$1520 \text{ in}^3 \times 0.20 = 304 \text{ in}^3 \text{ (flow rate wanted 304 in}^3\text{/min)}$$

$$304 \text{ in}^3\text{/min divided by 61.024} = 4.98 \text{ l/min AIMS CO}_2\text{ flowmeter setting.}$$

COIC CO₂ Chamber (cylinder)

$$\pi \times \text{Radius}^2 \times \text{Height}$$

$$3.14 \times 4''^2 \times 7'' = 352 \text{ in}^3$$

$$352 \text{ in}^3 \times 0.20 = 70 \text{ in}^3 \text{ (flow rate wanted 70 in}^3\text{/min)}$$

$$70 \text{ in}^3\text{/min divided by 61.024} = 1.15 \text{ l/min CO}_2\text{ flowmeter setting}$$

MODEL	DESCRIPTION
CO2-SC100	flow rates 0.5 - 5 l/min
CO2-LC500	flow rates 1 - 10 l/min
CO2-XL900	flow rates 3 - 25 l/min
CO2-WMB2	wall mount brackets (only)
CO2-FMT2	10 ft. tubing only, 5/16" id x 1/16" od



Braintree Scientific



Anesthesia Pole Stand



- ▶ For portable transport of E-Z Anesthesia systems with a minimal footprint.
- ▶ Accommodates each of our three New Generation E-Z Anesthesia systems
- ▶ Convenient, slide-on mounting
- ▶ Swivel top allows precise positioning
- ▶ Accommodates two E-tanks
- ▶ Stable five-wheel base
- ▶ Optional Mayo Tray for surgical tools available – call for pricing

MODEL	DESCRIPTION
E-28000	Anesthesia Pole Stand

Stainless Steel Mobile Workstation



E-25000
(Components shown sold separately)

Mobile workstations constructed of heavy-duty stainless steel with locking casters, can easily move to multiple locations.

Work surface of 3.5' x 2' Open side shelves accommodate up to 2 CO₂ tanks and 2 O₂ tanks. Below work surface is an open shelf and a 2-door locking cabinet. System can be conveniently set up for maximum flexibility and mobility.

Small Mobile Workstation integrates all E-Z anesthesia components into one convenient mobile workstation. Half the size of the EZ-25000 constructed of the same materials. The top work surface measures 22" x 21" and comes with a locking cabinet and interior shelves.

MODEL	DESCRIPTION
E-25000	Mobile Workstation
E-27000	Small Mobile Workstation



E-27000
(Components shown sold separately)

Nemi Guillotine

- ▶ Easy blade replacement
- ▶ Mounting plates for all models (optional)
- ▶ Manufactured using only the finest materials
- ▶ Built to stay in your lab
- ▶ Extremely cost effective



Nemi Guillotine Maintenance Kit:

Includes all the tools needed to service your guillotine; wrenches screwdrivers, sharpening stone, sharpening oil, lubricating oil and spare hardware all housed in a tool box along with instructions.

MODEL	DESCRIPTION
NS-801	Nemi Guillotine, Mouse, 1.5" opening along side
NS-802	Nemi Guillotine, Rodent, 2" opening along each side
NS-803	Nemi Guillotine, Rodent, 3" opening along side
NS-801-RB	801 Replacement Blades
NS-802-RB	802 Replacement Blades
NS-803-RB	803 Replacement Blades
NS-80-KIT	Nemi Guillotine Maintenance Kit

DecapiCones®

Economical mouse and rodent restrainer



Make injections and decapitation quicker and easier with Braintree's DecapiCones®. Tapered plastic film tubes provide quick and easy restraint of rats, mice and other small animals. I.P. injections can be made directly through the film! DecapiCones® restrain post-decapitation kicking and prevent personal contact with feces or urine.

A unique dispenser holds DecapiCones® open and ready for use. Simply hold DecapiCone in one hand and introduce the animal with the other. Animals enter readily, heading for the breathing hole at the small end. Then roll and squeeze the large end closed.

May be used repeatedly for injections and discarded when soiled. For decapitation, hold at the rear and insert the small end into decapitator.

MODEL	DESCRIPTION
MDC-200	DecapiCones® for Mice (Includes: 2 dispensers, 100 bags each. Total 200 cones)
DC-200	DecapiCones® for Rats (Includes: 4 dispensers, 50 bags each. Total 200 cones)
DCL-120	DecapiCones® for Large Rats (500-800g) (Includes: 4 dispensers, 30 bags each. Total 120 cones)





T/FLEX® Plus Gloves

Cut resistant gloves for animal handling



Gloves are suitable for the safe handling of small laboratory animals including rodents. T/FLEX® PLUS gloves are a 13 gauge seamless knit shell; material is Dyneema® engineered fibers plated with Lycra® -

Spandex®, Thermax® and the antimicrobial treatment Alphasan® combine to provide a comfortable glove featuring the highest cut resistance. Gloves conform to international safety standards for cut resistance.

MODEL	DESCRIPTION	SIZE
TFL-13G6	T/flex Plus handling gloves.	Extra Small
TFL-13G7	T/flex Plus handling gloves.	Small
TFL-13G8	T/flex Plus handling gloves.	Medium
TFL-13G9	T/flex Plus handling gloves.	Large
TFL-13G10	T/flex Plus handling gloves.	Extra Large

Kevlar Goatskin Handling Gloves

Black goatskin leather glove, lined with 100% fine knit Kevlar. May be worn on their own for handling small animals. Fabricated for flexibility, comfort and safety during long periods of wear. Sold as pairs.



MODEL	DESCRIPTION	SIZE
KVL-LTH-S	Kevlar Deerskin Handling Gloves	Small
KVL-LTH-M	Kevlar Deerskin Handling Gloves	Medium
KVL-LTH-L	Kevlar Deerskin Handling Gloves	Large
KVL-LTH-X	Kevlar Deerskin Handling Gloves	Extra Large

Armour Touch Metal Mesh® Gloves

Protects hands from teeth and claws when handling small animals

YES! You have seen this material used for anti-shark suits.

Braintree Scientific's metal mesh gloves provide security and a sure grip. This is the original and only metal mesh glove for rodent handling.



Don't be fooled by imitations!

Experience shows animals are easier to control when handlers are relaxed and confident. Much better than leather since metal mesh is more flexible, is readily cleaned, won't stain or corrode and doesn't carry odors.

Gloves may be worn over surgical gloves. Adjustable buckle wrist band prevents slipping. Convert right to left by turning inside out. Order by size.

Please note these gloves run large.

MODEL	DESCRIPTION	SIZE
MMG-XS	Armour Touch Metal Mesh Gloves	Extra Small 7
MMG-S	Armour Touch Metal Mesh Gloves	Small 8
MMG-M	Armour Touch Metal Mesh Gloves	Medium 9
MMG-L	Armour Touch Metal Mesh Gloves	Large 10

*Price per glove - ambidextrous (approximate surgical glove size)

Blood Collection for Facial Vein (Submandibular) Blood Samples



GoldenRod Animal Lancet allows user to take multiple blood samples from small animals in the same day and never lose or hurt an animal. Speed up the blood collecting process with this specially designed and sterile, disposable blood lancet that is inexpensive, easy, and fast to use. Available in a wide variety of point sizes for various size animals and volumes required.

Developed for researchers that requested a shorter point for use on very young mice and mice of all ages where only one or two drops of blood are needed. The shorter the point length, the less pain and trauma for the animal, and the quicker the healing.

- ▶ Safe - won't hurt the animal
- ▶ Easy to use - works every time
- ▶ Consistent amounts of blood each test
- ▶ Rapid collection - blood flow stops in seconds
- ▶ Allows multiple tests of the same animal
- ▶ Fast - Sterile ready for use
- ▶ Disposable - no cross contamination
- ▶ Humane - similar lancets are used on humans
- ▶ Inexpensive - reduce research costs

Sample Prep and Collection



Goldenrod Lancets come in several point lengths for various size animals and blood volumes required. Choose the proper lancet point length corresponding to the age of the mouse and the volume of blood needed.

Point Length Recommendations:

For Mice: 3mm - for only 1 or 2 drops

4mm - under 2 months

5mm - 2 to 6 months

5.5mm - over 6 months

For Rats: 5.5mm - 6 mm under 3 months

6mm or 7mm - 3 to 4 months

7mm or 8mm - over 5 months

Always use the shortest point possible to draw the amount of blood required.

Always be careful when doing multiple bleedings in one day, or daily bleedings, that the volume of blood harvested does not exceed the total volume recommended for that size animal's safety and health.

MODEL	DESCRIPTION
GR-3MM	Goldenrod Animal Lancet 3mm Sterile, 5 trays of 200
GR-4MM	Goldenrod Animal Lancet 4mm Sterile, 5 trays of 200
GR-5MM	Goldenrod Animal Lancet 5mm Sterile, 5 trays of 200
GR-5.5MM	Goldenrod Animal Lancet 5.5mm Sterile, 5 trays of 200
GR-6MM	Goldenrod Animal Lancet 6mm Sterile, 5 trays of 200
GR-7MM	Goldenrod Animal Lancet 7mm Sterile, 5 trays of 200
GR-8MM	Goldenrod Animal Lancet 8mm Sterile, 5 trays of 200



Microvette® CB 300

Capillary collection and sample container in one unit



The Microvette® CB 300 capillary tube, along with its attached push cap, is supplied complete with a carrier tube that is also suited for transport and centrifugation. Cylindrical outer tube is ideal for attachment of a barcode label for direct sample analysis.

Extremely slim design of the Microvette® CB 300's capillary tube ensures optimum serum/plasma recovery following centrifugation.

MODEL	DESCRIPTION	UNITS
MV-CB300-16440-BX	Serum/Clotting activator	100/pk
MV-CB300-16440-CS	Serum/Clotting activator	1000/cs
MV-CB300-16443-BX	Lithium-Heparin	100/pk
MV-CB300-16443-CS	Lithium-Heparin	1000/cs
MV-CB300-16444-BX	Hematology/Potassium EDTA	100/pk
MV-CB300-16444-CS	Hematology/Potassium EDTA	1000/cs

Microvette® 100/200

Provides all the benefits of a universally suitable capillary blood collection system



The Microvette® 100/200 offers the ideal solution for collection of even the smallest blood volumes. Preassembled end-to-end capillary ensures a controlled collection to capillary technique. The Microvette® enables blood sampling using either the special rim or gravity-flow principle without any problem.

Depending on individual requirements, the Microvette® is available with a cylindrical inner tube for optimum mixing results or a conical inner tube for a high serum/plasma supernatant. Cylindrical outer container is ideal for barcodes and patient labels. Special cap design minimizes aerosol effect when tube is opened and provides safe sealing features.

MODEL	DESCRIPTION	UNITS
MICROVETTE 100 -100µL, Conical inner tube		
MV-100-201280-BX	Serum	100/pk
MV-100-201280-CS	Serum	1,000/cs
MV-100-201282-BX	Lithium-Heparin	100/pk
MV-100-201282-CS	Lithium-Heparin	1,000/cs

MICROVETTE 100 -100µL, Round bottom inner tube		
MV-100-201278-BX	Potassium EDTA	100/pk
MV-100-201278-CS	Potassium EDTA	1,000/cs

MICROVETTE 200 -200µL, Conical inner tube		
MV-200-201289-BX	Glucose	100/pk
MV-200-201289-CS	Glucose	1,000/cs
MV-200-201290-BX	Serum	100/pk
MV-200-201290-CS	Serum	1,000/cs
MV-200-201292-BX	Lithium-Heparin	100/pk
MV-200-201292-CS	Lithium-Heparin	1,000/cs

MICROVETTE 200 -200µL, Round bottom inner tube		
MV-200-201288-BX	Potassium-EDTA	100/pk
MV-200-201288-CS	Potassium-EDTA	1,000/cs
MV-200-201291-BX	Serum-Gel	100/pk
MV-200-201291-CS	Serum-Gel	1,000/cs

Microvette® 300/500

Blood collection with collection rim



These Microvette® tubes are ideal for collection of blood using gravity-flow principle of collection. Any part of the entire rim can be used. The special conical design of the Microvette® 300's inner tube enables thorough mixing, even with small sample volumes. Microvette® offers all the advantages of a modern blood collection system:

- ▶ Choice of different inner tube designs with 300 or 500 µl volume capacity and corresponding graduation
- ▶ Special twist cap design is easy to open and minimizes aerosol effect
- ▶ Cylindrical outer container is ideal for barcode or patient labels

MODEL	DESCRIPTION	UNITS
Microvette 300		
MV-300-201308-PK	Serum	100/pk
MV-300-201308-CS	Serum	1,000/cs
MV-300-201309-PK	Lithium-Heparin	100/pk
MV-300-201309-CS	Lithium-Heparin	1,000/cs

Microvette 500		
MV-500-201341-BX	EDTA	100/pk
MV-500-201341-CS	EDTA	1,000/cs
MV-500-201343-BX	Serum	100/pk
MV-500-201343-CS	Serum	1,000/cs
MV-500-201344-BX	Serum-Gel	100/pk
MV-500-201344-CS	Serum-Gel	1,000/cs
MV-500-201345-BX	Lithium-Heparin	100/pk
MV-500-201345-CS	Lithium-Heparin	1,000/cs
MV-500-201346-BX	Lithium-Heparin Gel	100/pk
MV-500-201346-CS	Lithium-Heparin Gel	1,000/cs

Multivette® 600

Capillary and venous blood collection in one system



The unique Multivette® 600 is the only product that can collect both venous and capillary blood. For venous blood collection, a Luer needle is connected to the capillary tube of the Multivette®, which automatically fills by normal venous pressure. Capillary blood is performed using the end-to-end principle. The special pre-assembled capillary tube is designed to hold 600µL of blood.

MODEL	DESCRIPTION	UNITS
MV-600-151670-BX	Serum/Clotting Activator	100/pk
MV-600-151670-CS	Serum/Clotting Activator	1000/cs
MV-600-151671-BX	Hematology/Potassium EDTA	100/pk
MV-600-151671-CS	Hematology/Potassium EDTA	1000/cs
MV-600-151672-BX	Glucose/Flouride	100/pk
MV-600-151672-CS	Glucose/Flouride	1000/cs
MV-600-151673-BX	Plasma /Lithium-Heparin	100/pk
MV-600-151673-CS	Plasma /Lithium-Heparin	1000/cs
MV-600-151674-BX	Serum Gel/Clotting Activator	100/pk
MV-600-151674-CS	Serum Gel/Clotting Activator	1000/cs
MV-600-151675-BX	Plasma Gel/Lithium-Heparin	100/pk
MV-600-151675-CS	Plasma Gel/Lithium-Heparin	1000/cs

A full selection of Sarstedt tubes is available, please email info@BraintreeSci.com for details and pricing.



Prepared Micro Tubes with Attached Push Cap Closure

- ▶ Skirted, conical base and label
- ▶ Preparations: Serum clotting activator, plasma lithium heparin, hematology potassium EDTA and coagulation citrate



MODEL	DESCRIPTION	UNITS
PMT-1500-PK	Serum-Gel, 1.1 ml	100/pk
PMT-1500-CS	Serum-Gel, 1.1 ml	1,000/cs
PMT-1501-PK	Serum, 1.3 ml	100/pk
PMT-1501-CS	Serum, 1.3 ml	1,000/cs
PMT-1503-PK	Lithium-Heparin, 1.3 ml	100/pk
PMT-1503-CS	Lithium-Heparin, 1.3 ml	1,000/cs
PMT-1504-PK	EDTA, 1.3 ml	100/pk
PMT-1504-CS	EDTA, 1.3 ml	1,000/cs
PMT-1506-PK	Citrate, 0.5 ml	100/pk
PMT-1506-CS	Citrate, 0.5 ml	1,000/cs

Minivette® POCT

Easy sample recovery due to optimal capillary features

- ▶ Precise dispensing of small whole blood volumes
- ▶ Prevents spillage during transfer to test card
- ▶ Available in 20µl and 50µl volumes
- ▶ Preparations: Neutral, heparin and EDTA



MODEL #	DESCRIPTION	COLOR CODE	UNITS
MP10-2111-PK	10 µl, neutral	White	200/pk
MP10-2111-CS	10 µl, neutral	White	1,000/cs
MP20-2111-PK	20 µl, neutral	White	200/pk
MP20-2111-CS	20 µl, neutral	White	1,000/cs
MP50-2111-PK	50 µl, neutral	White	200/pk
MP50-2111-CS	50 µl, neutral	White	1,000/cs
MP20-2112-PK	20 µl, Lithium-Heparin	Orange	200/pk
MP20-2112-CS	20 µl, Lithium-Heparin	Orange	1,000/cs
MP50-2112-PK	50 µl, Lithium-Heparin	Orange	200/pk
MP50-2112-CS	50 µl, Lithium-Heparin	Orange	1,000/cs
MP20-2113-PK	20 µl, EDTA	Red	200/pk
MP20-2113-CS	20 µl, EDTA	Red	1,000/cs
MP50-2113-PK	50 µl, EDTA	Red	200/pk
MP50-2113-CS	50 µl, EDTA	Red	1,000/cs

Prepared Micro Tubes with Screw Cap Closure

- ▶ Closure contains integral O-ring
- ▶ Sample volume 1.3ml
- ▶ Skirted, conical base
- ▶ Label



MODEL	DESCRIPTION	UNITS
MT-1350	Micro Tube, 1.3ml, Citrate	1,000/cs
MT-1378	Micro Tube, 1.1ml, Serum/Gel	1,000/cs
MT-1392	Micro Tube, 1.3ml, Serum/Clotting Activator	1,000/cs
MT-1393	Micro Tube, 1.3ml, Plasma /Lithium-Heparin	1,000/cs
MT-1395	Micro Tube, 1.3ml, Hematology/Potassium EDTA	1,000/cs

New! Stainless Steel Brain Matrices



Highly polished, high quality stainless steel matrices are precisely machined to ensure reproducible sections. Brain matrices allows users to slice either coronal (perpendicular to center line) or sagittal (parallel to center line) sections through the brain at 1mm or 0.5mm intervals.

MODEL	DESCRIPTION
BS-SS-500C	Mouse 40-75gr, 1mm Coronal
BS-SS-500S	Mouse 40-75gr, 1mm Sagittal
BS-SS-505C	Mouse 40-75gm, 0.5 mm Coronal
BS-SS-505S	Mouse 40-75gr, 0.5 mm Sagittal
BS-SS-600C	Rat 175-300gr, 1 mm Coronal
BS-SS-600S	Rat 175-300gr, 1 mm Sagittal
BS-SS-605C	Rat 175-300gr, 0.5 mm Coronal
BS-SS-605S	Rat 175-300gr, 0.5 mm Sagittal
BS-SS-700C	Rat 300-600gr, 1 mm Coronal
BS-SS-700S	Rat 300-600gr, 1 mm Sagittal
BS-SS-705C	Rat 300-600gr, 0.5 mm Coronal
BS-SS-705S	Rat 300-600gr, 0.5 mm Sagittal

Precision Brain Slicer

Aids users in free hand dissection of discrete regions of rodent brain. Allows user to slice either coronal or sagittal sections through brain (including olfactory bulbs) at intervals as small as 1mm. All PBS's are identical to insure reproducible sections on a day to day, year to year basis.



Applications:

- ▶ Biochemical Pharmacology: The reproducible removal of small brain regions for biochemical analysis, such as the determination of neurotransmitter and metabolite concentrations. Individual brain areas may be either dissected or micropunched from slices formed
- ▶ Anatomy: Precise blocking of the brain prior to microtome sectioning
- ▶ Neurophysiology: Reproducible blocking of the brain prior to vibrotome sectioning

Order *S* for a sagittal style, and *C* for a coronal style.

MODEL	SPECIFICATIONS	CAVITY DIMENSIONS
BS-Z-2000C	Adult Mouse, 30gm	13.9 x 9.9 x 7.5mm
BS-Z-2000S	Adult Mouse, 30gm	13.9 x 9.9 x 7.5mm
BS-Z-3000C	Rat, 125-185gm	20 x 13 x 6.8mm
BS-Z-3000S	Rat, 125-185gm	20 x 13 x 6.8mm
BS-Z-4000C	Rat, 200-400gm	25.5 x 16 x 11.2mm
BS-Z-4000S	Rat, 200-400gm	25.5 x 16 x 11.2mm

Tissue Slicer Blades

MODEL	DESCRIPTION
BS-BLADES	25 count Steel Blades

Sterile Disposable Biopsy Punch with Plunger



MODEL	DESCRIPTION	UNITS
MTP-33-31AA	1mm diameter.	25/box
MTP-33-31A	1.5mm diameter.	25/box
MTP-33-31	2mm diameter.	25/box
MTP-33-32	3mm diameter.	25/box
MTP-33-34	4mm diameter.	25/box



"Blue Wax" Dissection Tray

Add a dissection tray with a wax base pinning surface for detailed dissections!

Specially formulated to provide proper consistency to allow pins to stick firmly and be easily removed. Dissection tray uses a completely environmentally safe wax product instead of "black wax" like product used in most other dissection trays. MSDS sheet for this product lists no toxic chemicals and no fire, health or reactivity hazards with this product. "Blue Wax" can be heated to renew surface and dissection tray can be reused several times.



MODEL	DESCRIPTION
DTW1	Dissection Tray 9.5" x 7" x 1"
DTW5	Dissection Tray (five trays per pack)

Hybex™ Reusable Media Bottles

Manufactured from high quality, borosilicate 3.3 glass. With their superior chemical resistance, these bottles are ideal for storage of reagents, culture media, biological fluids and a variety of other aqueous and nonaqueous solutions.

A low coefficient of thermal expansion (3.3), provides temperature resistance that is far superior to that of standard lab glass (or soda lime glass). Hybex glass can withstand temperatures from -70 to 500°C, permitting repeated use in freezers, microwaves, autoclaves and dry heat sterilization chambers.

All hybex media bottles include a drip-free sealing ring as well as a standard blue polypropylene (GL45) sealing cap. Bottles are also available with green, purple, white and yellow caps, or in an assortment pack containing two of each color.



Specifications:

Material: Hybex™ borosilicate glass (3.3)

Cap thread size: GL45*

Temperature range: -70° to 500°C

Sterilization: Autoclave or dry heat

Cap material: Polypropylene (140°C)

Cap colors: Standard blue, green, purple, yellow, white, assorted

Please replace -X with (-B) for blue, (-G) for green, (-P) for purple, (-Y) for yellow, (-W) for white or (-AS) for assorted caps (2 of each color)

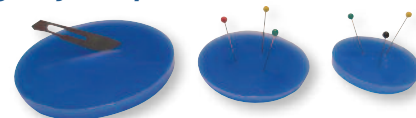
MODEL	DESCRIPTION
B3000-50-X	Bottle, 50ml (GL32), 10/pk.
B3000-100-X*	Bottle, 100ml (GL45) 10/pk.
B3000-250-X*	Bottle, 250ml (GL45) 10/pk.
B3000-500-X*	Bottle, 500ml (GL45) 10/pk.
B3000-1000-X*	Bottle, 1000ml (GL45) 10/pk.
B3000-2000-X*	Bottle, 2000ml (GL45) 5/pk.
B3000-SP-X*	Bottle, StarterPack (GL45) (pack of 10 bottles, includes 2 x 100ml, 3 x 250ml, 3 x 500ml, and 2 x 1L)
B3000-CAP-X*	Replacement cap, (GL45), 10/pk.
B3000-RIN	Replacement sealing ring (GL45), 10/pk.
B3000-CAP2	Replacement cap, blue (GL32), 10/pk.
B3000-RIN2	Replacement sealing ring (GL32), 10/pk.
B3000-CAP-R	High Temperature Cap, red, up to 180°C, 10/pk.

* 50ml bottles are only supplied with GL32 sealing caps

"Blue Wax" Tissue Processing Disc

Makes tissue processing easy and quick

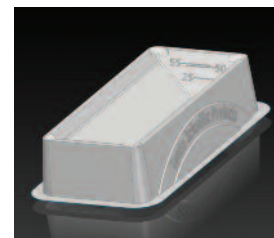
Process tissue using a clean blue wax surface. Layout, pin, and trim tissue. Use for processing, inspecting, and documenting tissue pathology. "Blue Wax" is specially formulated to provide the proper consistency to allow pins to stick firmly and be easily removed.



MODEL	DESCRIPTION	QTY/PK
TPD-L	Large Tissue Processing Disc (4" dia., 0.25" thick)	10
TPD-M	Medium Tissue Processing Disc (2.75" dia., 0.25" thick)	10
TPD-S	Small Tissue Processing Disc (2" dia., 0.25" thick)	10
TPIN	Ball Head Tissue Pins, S/S (1.5" long)	50

Multi-Channel Lab Trough

The unique design of this reagent reservoir was created through many years of product development, manufacturing design and industry experience to be a durable and easy-to-use tool for the researcher. Choose from four different sizes of the lab trough, 15ml, 25ml, 50ml and 100ml in both sterile and non-sterile packaging.



The sterilization process is by gamma irradiation which ensures the absence of growth-affecting residue. Lab troughs are HDPE, White PS and Clear PET.

Multi-channel lab trough is a state-of-the-art tray developed by Quake Scientific Products.

- Graduations on narrow side inner wall provide a quick reference for remaining solutions
- Unique rigid base design to help avoid spillage
- Pour spouts on all four corners
- Unique bottom trough design allows for complete removal of small volumes of solutions
- Sterile lab troughs packaged in easy open bags

MODEL	DESCRIPTION	QTY/PK	MATERIAL
Q100-550S	5ml Shorti Sterile Bulk Packaged 10/bag	50	PET
Q100-550	5ml Shorti Non-Sterile Bulk	50	PET
Q200-550S	5ml Shorti Sterile Bulk Packaged 10/bag	50	PS
Q200-550	5ml Shorti Non-Sterile Bulk	50	PS
Q100-15100S	15ml Sterile Bulk Packaged 5/bag	100	PET
Q100-1550	15ml Non-Sterile Bulk	50	PET
Q100-1550S	15ml Sterile Individually Wrapped	50	PET
Q200-15100S	15ml Sterile Bulk Packaged 5/bag	100	PS
Q200-1550	15ml Non-Sterile Bulk	50	PS
Q200-1550S	15ml Sterile Individually Wrapped	50	PS
Q100-25100S	25ml Sterile Bulk Packaged 5/bag	100	PET
Q100-2550	25ml Non-Sterile Bulk	50	PET
Q100-2550S	25ml Sterile Individually Wrapped	50	PET
Q200-25100S	25ml Sterile Bulk Packaged 5/bag	100	PS
Q200-2550	25ml Non-Sterile Bulk	50	PS
Q200-2550S	25ml Sterile Individually Wrapped	50	PS
Q100-50100	50ml Non-Sterile Bulk	100	PET
Q100-50100S	50ml Sterile Individually Wrapped	100	PET
Q100-50200S	50ml Sterile Bulk Packaged 5/bag	200	PET
Q100-5050	50ml Non-Sterile Bulk	50	PET
Q100-5050S	50ml Sterile Individually Wrapped	50	PET
Q200-50100	50ml Non-Sterile Bulk	100	PS
Q200-50100S	50ml Sterile Individually Wrapped	100	PS
Q200-50200S	50ml Sterile Bulk Packaged 5/bag	200	PS
Q200-5050	50ml Non-Sterile Bulk	50	PS
Q200-5050S	50ml Sterile Individually Wrapped	50	PS

100ml HDPE trays available online at BraintreeSci.com



Techniplast® Metabolic Cage Systems



Meticulously engineered cages feature a unique funnel and cone design that effectively separates feces and urine into tubes outside the cage. No urine washover and no chance for urine to enter the feces tube, so separation is immediate and complete. For untainted and reliable samples. All cage parts and stands are autoclavable. Replacement parts available.

- ▶ **Cover** - Large, vented, keeps animal securely in cage. Can be removed for easy access to animal
- ▶ **Upper Chamber** - Made of transparent PC. Surface is smooth, gnaw-proof, noiseless. Cleans easily with warm soapy water or detergent solution
- ▶ **Feeder Chamber** - Located outside cage. Size discourages rodent from nesting or sleeping inside
- ▶ **Feed Drawer** - PC drawer slides out for easy filling without disturbing animal. Ideal for slurries, liquids or powders. Not designed for food in pellet form. Rear portion helps to catch spilled food to prevent contamination of feces
- ▶ **Feces Collection Tube** - Made of non-wetting PMP. Pellets roll down sides of funnel to be collected in tube. Unlocks with single twist from outside of cage without disturbing animal
- ▶ **Urine Collection Tube PMP** - Graduated in cubic centimeters. Unlocks from outside cage without disturbing animal. Can be cooled with an ice bath
- ▶ **Lower Chamber PC** - Can be removed without disturbing animal. Cleans with warm soapy water or detergent solution
- ▶ **Stand** - SS stand or rack must be used with any rodent metabolic cage. Stand supports one cage and provides easy access to all parts. 12-cage racks and refrigerated collection racks are also available. All stands and racks are sold separately
- ▶ **Collection Funnel and Separating Cone** - Unique design and non-wetting PMP ensure immediate, complete separation of feces and urine
- ▶ **Support Grid** - SS grid lets excreta pass through the widely-spaced bars; mouse cage includes mouse-size grid. Grids have handles for easy transport of cage without stand
- ▶ **Water Bottle** - Calibrated PC bottle with SS cap and sipper tube.
- ▶ **Water Spillage Tube** - Collects any water that animals spill. Facilitates accurate collection of fluid intake data
- ▶ Each cage includes complete assembly and use instructions, replacement parts list and warranty card

Designed for rats, guinea pigs and hamsters. Includes same fluid collection tubes and rings as the smaller rodent cages and the following components sized for larger rodents: upper chamber, water bottle and support, feeder assembly and urine collection tube.

Includes appropriate feeder drawer and chamber, four fluid collection tubes with funnels (two water spillage tubes and two urine collection tubes), two feces collection tubes and two urine rings.

All cages require support stand.

MODEL	DIMENSION
360-0M021	Single Mouse Metabolic Cage
360-3M020	Single Mouse Cage support plate (only required if purchasing a rack)
370-0M022	Metabolic Cage for groups of 3 mice
370-0M061	Metabolic Cage for rats <150g
370-0M071	Metabolic Cage for rats 150-300g
370-1M081	Metabolic Cage for rats >300g

Contact us if you would like to modify your existing cage to house smaller rodents.

Diuresis Metabolic Cage for Rodents

These meticulously engineered cages feature a unique funnel and cone design that effectively separates feces and urine into tubes outside the cage. There's no urine wash-over and no potential for urine to enter the feces tube, so separation is immediate and complete. The results are untainted and reliable samples. The cage has only 14 parts. The components are designed for simplicity of operation and total part interchangeability, major consideration in multi-unit testing programs. All parts below the cage floor are removable without disturbing the test animal, allowing tests to be conducted over a prolonged period of time without interruptions caused by animal re-acclimation. The cage performs well with either mice (in groups) or rats; only the feeders and floor grids must be changed.

All cages require support stand.

MODEL	DIMENSION
3700D-000	For Rats up to 300g
3701D-000	For Rats >300g

Cage Stands and Racks

Cage Stands

- ▶ Stainless steel; nylon supports
- ▶ Holds one rodent metabolic cage

Vertical Metabolic Cage Rack

- ▶ Holds up to 12 Techniplast metabolic cages for small rats and mice, 3 x 4 configuration
- ▶ Can also be adjusted to hold eight cages for large rodents. Rack is mounted on swivel casters; two lock for safety.



MODEL	DIMENSION
3M01D100	Metabolic Cage Support Stand for Single Cage
3M12D100	Metabolic Cage Rack Vertical, 12-Cage Rack

LabSand®

Easy collection of rodent urine samples

- Suitable for testing all parameters
- Clean, uncontaminated samples
- Reduce animal stress
- Non-invasive
- 100% natural
- Easy to use

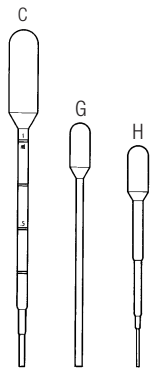


LabSand® is a revolutionary biodegradable hydrophobic sand that has a natural non-toxic urine-repelling coating. Use it to quickly collect urine samples from laboratory rodents without resorting to metabolic caging protocols or invasive procedures. To use, simply spread LabSand® onto a clean surface or substitute as cage bedding in home cage and let mice, rats, hamsters, gerbils, etc. roam freely and urinate spontaneously. Urine stays on top of LabSand® and can be easily collected with a pipette, or sampled directly with a urine test strip. Depending upon species, hydration status, and sensitivity of analyses, 30-60 minutes is usually sufficient for collection of a STAT urine sample, and 1-3 hours for a more robust quantitative collection. Dispose used LabSand® with laboratory waste.

MODEL	DESCRIPTION
LABSAND-3PK	Urine Sample Collection Sand, 3/pk
LABSAND-CS	Urine Sample Collection Sand, six 3/pks

Transfer Pipettes

Single-use Pasteur pipettes



Our range includes a large variety of transfer pipettes for safe and convenient application when transferring liquids in laboratories.

Disposable Pasteur pipettes are suited for versatile application without any risk of injury or infection from broken glass.

As single-use products, pipettes safely prevent carry over or cross-contamination.

Practical graduations are ideally suited for sample measurement and transfer. Pipettes can be heat-sealed to store residual volumes.

For a sterile transfer of liquids, our range includes sterile options either individually wrapped or 20 pipettes per pack.

Polyethylene material is environmentally neutral thereby ensuring non-toxic disposal.

MODEL	DESCRIPTION	LENGTH	BULB VOL	DROP SIZE	TYPE	GRAD
PIP-2020	5 Packs of 20 Pipettes Sterile	156mm	3.5ml	30-45µL	C/1:0.25ml	
PIP-2001	100 pieces individually wrapped Sterile	156mm	3.5ml	30-45µL	C/1:0.25ml	
PIP-1170	100 pieces - Non Sterile	115mm	1ml	45-55µL	G	
PIP-1180	100 pieces - Non Sterile	104mm	1ml	17-22 µL	H	

Kit4Cat

Cat Urine Sample Collection Kit

- Painless, stress-free urine collection
- Non invasive
- Easy to use
- 100% natural



Kit4Cat is revolutionary biodegradable hydrophobic sand that has a natural non-toxic urine repelling coating. It allows veterinarians and technicians to quickly and easily collect urine samples without resorting to invasive procedures such as Cystocentesis. Simply spread a bag of Kit4Cat sand into a clean, empty tray and let animal urinate freely on sand. Cat's urine will stay on top, allowing user to collect the urine sample using a pipette and vial that are included. Collecting a urine sample with Kit4Cat is non-invasive, keeping the cat happy and the vet and technician scratch free. Kit4Cat feels and smells just like regular sand, so cats are very cooperative patients when you need to collect a urine sample. Veterinarian approved.

Benefits for Veterinarians and Technicians:

- Kit4Cat and Cystocentesis test results are the same
- Easy urine collection saves time
- Obtain a clean uncontaminated sample
- Remain bite and scratch free
- Collect urine from older and obese cats with ease
- Biodegradable for easy disposal
- 100% natural and non-toxic

MODEL	DESCRIPTION
KIT4CAT	3/pack
KIT4CAT	Six 3/packs

Rodent Holding Cage

Perfect for use with LabSand urine collection sand. Offers temporary holding area for small rodents. Includes reusable cage tag for logging animal specific information.



MODEL	DESCRIPTION
HC-7-7-5	Holding Cage, 7" x 7" x 5" with tag



New! Pipette Checkit® Pro

Verification on the spot



Whenever you need a fast, quantitative assessment of a pipette's accuracy, just pull out Pipette Checkit® Pro. Available for various size pipettes, Checkit Pro checks the pipette's accuracy at the bottom, middle and top of its range.

- ▶ User-friendly operation
- ▶ Certified and traceable
- ▶ Easy to read markings indicate volumetric accuracy
- ▶ ISO 8655 calibration standards indication
- ▶ Elegant design
- ▶ Minimal evaporation
- ▶ Made in the USA

Be confident in your results. Rest assured that your pipettes are delivering accurate volumes while you conduct experiments.

Get instant, easy verification. Anywhere! Evaluate pipette accuracy on the spot in just seconds – no matter where you are. For low volumes, outperforms a 5-digit balance.

Maintain proper pipette technique. Use the Checkit Pro as a training tool with students and technicians to verify proper pipette technique. The Checkit Pro requires no special training and is easy to use even for novice lab members.

MODEL	DESCRIPTION	QTY/PK
CP-C02	Pipette Checkit Pro model for 2uL pipettes.	5/pk
CP-C05	Pipette Checkit Pro model for 5uL pipettes.	5/pk
CP-C10	Pipette Checkit Pro model for 10uL pipettes.	5/pk
CP-C20	Pipette Checkit Pro model for 20uL pipettes.	5/pk
CP-C50	Pipette Checkit Pro model for 50uL pipettes.	5/pk
CP-C100	Pipette Checkit Pro model for 100uL pipettes.	5/pk
CP-C200	Pipette Checkit Pro model for 200uL pipettes.	5/pk

BioPette™ Plus

Autoclavable pipettes designed for exceptional comfort and accuracy

Precision pipettes are designed for exceptional comfort and accuracy. Lightweight and well balanced, they fit comfortably in either right or left hand with large digital display visible to user. Chemically resistant, maintenance-free seals and finely polished pistons provide unsurpassed accuracy sample after sample.



Continuously adjustable, digital micrometer is slightly recessed to prevent unintentional change and is protected from effects of thermal expansion by insulated body of the pipette. For convenience, volume can also be adjusted by turning push-button. Ergonomically positioned, tip ejector reduces fatigue during prolonged use.

Discovery pipettes have a universal shaft that accepts most pipette tips. Tip ejector is adjustable to accommodate various styles of tips and removable for pipetting into narrow tubes. Made from stainless steel, it will not rust, corrode or break. Discovery pipettes are fully autoclavable.

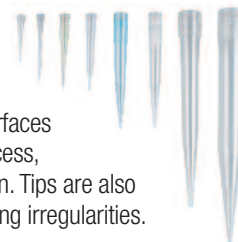
MODEL	DESCRIPTION
P3942-2	BioPette Plus Discovery Pipette, 0.1 - 2µL
P3942-10	BioPette Plus Discovery Pipette, 0.5 - 10µL
P3942-20	BioPette Plus Discovery Pipette, 2 - 20µL
P3942-100	BioPette Plus Discovery Pipette, 10 - 100µL
P3942-200	BioPette Plus Discovery Pipette, 20 - 200µL
P3942-1000	BioPette Plus Discovery Pipette, 100 - 1000µL
P3942-5000	BioPette Plus Discovery Pipette, 1000 - 5000µL
P3942-10000	BioPette Plus Discovery Pipette, 1000 - 10000µL
P4808-10	BioPette Plus Discovery Eight-Channel Pipette, 1 - 10µL
P4808-50	BioPette Plus Discovery Eight-Channel Pipette, 5 - 50µL
P4808-200	BioPette Plus Discovery Eight-Channel Pipette, 20 - 200µL
P4808-300	BioPette Plus Discovery Eight-Channel Pipette, 50 - 300µL
P4812-10	BioPette Plus Discovery Twelve-Channel Pipette, 1 - 10µL
P4812-50	BioPette Plus Discovery Twelve-Channel Pipette, 5 - 50µL
P4812-200	BioPette Plus Discovery Twelve-Channel Pipette, 20 - 200µL
P4812-300	BioPette Plus Discovery Twelve-Channel Pipette, 50 - 300µL
P3942-SK4	BioPette Plus Discovery 4 Pack Plus, Includes 4 Pipettes (P3942-10, -20, -200, -1000) One Carousel Stand and 3 Racks of BioFree Tips

Labnet BioFree™ Pipette Tips



Labnet BioFree pipette tips are designed to fit a wide variety of single and multi-channel pipettes. Flexible walls and a series of internal sealing rings ensure a secure fit and minimal force to eject.

Tips are manufactured from high quality, FDA compliant polypropylene in a clean room environment. Diamond polished, stainless steel molds produce a tip with exceptionally smooth surfaces and extreme accuracy. During manufacturing process, each lot of tips is tested for accuracy and precision. Tips are also carefully inspected for uniformity and manufacturing irregularities.



MODEL	DESCRIPTION
P1000-10	0.5 - 10µL pipette tips, case of 1,000 tips
P1000-1000	1000µL pipette tips, case of 5,000 tips (supplied in 5 x bulk packs of 1,000)
P1000-1000-R	1000µL pipette tips, case of 4,800 racked tips (supplied in 5 packs containing 10 x 96 racks)
P1000-10-R	0.5 - 10µL pipette tips case of 4,800 racked tips (supplied in 5 packs containing 10 x 96 racks)
P1000-10X	0.5 - 10µL pipette tips, extended length, case of 20,000 tips (supplied in 20 bulk packs x 1,000)
P1000-10X-R	0.5 - 10µL pipette tips, extended length case of 4,800 racked tips
P1000-200	200µL pipette tips, case of 20,000 tips (supplied in 20 x bulk packs of 1,000)
P1000-200-R	200µL max, case of 4,800 racked tips (supplied in 5 packs containing 10 x 96 racks)
P1000-300	300µL pipette tips, case of 10,000 tips (supplied as 10 x bulk packs of 1,000)
P1000-300-R	300µL pipette tips, case of 4,800 racked tips (supplied in 5 packs containing 10 x 96 racks)



Labnet Excel™ Multifunctional Electronic Laboratory Pipettes

Designed to fit comfortably in right or left hand. Lightweight and well balanced. Plunger button, located on back side of instrument, requires only small movement of index finger to activate, reducing risk of Repetitive Strain Injuries (RSI). Pipette tip ejector slides easily with slight pressure from thumb. Powered by a small removable, rechargeable, lithium-ion battery. Complete charge is achieved in eight hours and last for 2000 pipetting cycles. Ensures many hours of performance between charges. Multifunctional units with operational modes for standard and reverse pipetting as well as multiple and sequential pipetting, mixing of



samples and serial dilutions. All functions are easily programmed with one hand on well positioned display and keypad. Fully motorized piston drive and auto-calibration guarantee excellent accuracy and reproducibility.

MODEL	DESCRIPTION
P3600L-10	Single Channel, 0.5-10µl
P3600L-20	Single Channel, 2-20µl
P3600L-200	Single Channel, 10-200µl
P3600L-1200	Single Channel, 100-1200µl
P3608L-10	8 Channel, 0.5-10µl
P3608L-20	8 Channel, 2-20µl
P3608L-200	8 Channel, 10-200µl
P3608L-1200	8 Channel, 100-1200µl
P3612L-10	12 Channel, 0.5-10µl
P3612L-20	12 Channel, 2-20µl
P3612L-200	12 Channel, 10-200µl
P3612L-1200	12 Channel, 100-1200µl



Sample Processing

Bullet Blender® Homogenizer

Aim for higher efficiency, superior results and greater value

Ideal for a wide range of laboratory tasks, including disrupting, homogenizing, dissociating or lysing cells, tissues and plant matter. Achieves consistent results while saving time, effort and money.

- ▶ Easy operation - simply add samples, beads and buffer to tubes and place in Bullet Blender. Select run time and speed, close the lid and press "start". No clamp plates or locking rings to fiddle with.
- ▶ High-efficiency technology - using patented striking technology, "bullets" in the Bullet Blender repeatedly strike tubes resulting in vigorous agitation of samples and collisions between samples and beads inside tubes.
- ▶ High yields - delivers high efficiency under microprocessor-controlled conditions for consistent results. Due to unique design, minimal heat preserves sample quality.
- ▶ High throughput - runs up to 24 samples in parallel. No probes to clean between samples so there is no cross contamination.
- ▶ Choose from a variety of beads including RNase free, covering a wide array of applications and samples, packaged in bulk or pre-loaded in tubes. Bullet Blender comes with a starter pack sampling of beads.*



Specifications:

Capacity: Process up to 24 samples in 1.5 or 2ml tubes, up to 12 samples in 5ml tubes, or up to 8 samples in 50ml tubes

Tubes: Uses commonly available tubes

Environment: Operational in constant 4°C to 50°C. Use in refrigerator/cold room or an incubator

Air cooling option: Keeps samples near ambient temperatures

4C cooling option: Use dry ice to keep samples near 4C while processing

Speed control: Adjustable to handle gentle vortexing to homogenization of bones

Dimensions: Most models have a small footprint:

9" W x 10" D/22cm x 25cm

Largest model is 13" W x 14" D/33cm x 35cm

MODEL	DESCRIPTION	SAMPLE CAPACITY	TUBE/ SAMPLE SIZE
BBX-24	Bullet Blender	1-24	1.5ml tubes (up to 0.3g)
BBY-24	Bullet Blender Storm (Air cooling, accepts snap-cap or screw-cap tubes, bigger motor for tough samples)	1-24	1.5ml tubes (up to 0.3g)*
BB24-AU	Bullet Blender Gold (4C cooling, accepts snap-cap or screw-cap tubes, bigger motor for tough samples)	1-24	1.5ml tubes (up to 0.3g)*
BBY-5E	Bullet Blender 5E (Air cooling, bigger motor for tough samples)	1-12	5ml tubes (0.1g - 1.0g)
BB50-DX	Bullet Blender 50-DX (Air cooling)	1-8	50ml tubes (0.1g - 13.5g)
BB50-AU	Bullet Blender 50 Gold (4C cooling)	1-8	50ml tubes (0.1g - 3.5g)

Screw cap tubes also available

**Call for bead and bead kit pricing*

Prefilled Lysis Tube Kits

MODEL	DESCRIPTION	QTY
Prefilled with Stainless Steel Beads		
NAVYE1	1.5mL Eppendorf Safe-Lock tubes.	50
NAVYE1-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free.	50
NAVYE5	1.5mL Eppendorf Safe-Lock tubes.	250
NAVYE5-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free.	250
NAVYR1	1.5mL RINO screw-cap tubes prefilled.	50
NAVYR1-RNA	1.5mL RINO screw-cap tubes, RNase free.	50
NAVYR5	1.5mL RINO screw-cap tubes.	250
NAVYR5-RNA	1.5mL RINO screw-cap tubes, RNase free.	250
Prefilled with Beads		
GREENE1	1.5mL Eppendorf Safe-Lock tubes.	50
GREENE1-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free.	50
GREENE5	1.5mL Eppendorf Safe-Lock tubes.	250
GREENE5-RNA	1.5mL Eppendorf Safe-Lock tubes, RNase free.	250
GREENR1	1.5mL RINO screw-cap tubes.	50
GREENR1-RNA	1.5mL RINO screw-cap tubes, RNase free.	50
GREENR5	1.5mL RINO screw-cap tubes.	250
GREENR5-RNA	1.5mL RINO screw-cap tubes, RNase free.	250



BeadBug™ Microtube Homogenizer



- ▶ Extremely powerful mixing for lysis, grinding or homogenization
- ▶ Faster and more effective than tissue grinders
- ▶ Mix 1, 2 or 3 tubes simultaneously
- ▶ Extremely compact, less than 7" wide
- ▶ Eliminates cross contamination associated with hand held homogenizers

BeadBug™ is a high energy benchtop homogenizer that sets the performance standard for personal sized cell disruption and lysis instruments.

Simultaneous homogenization of up to 3 samples takes place (often within 45 seconds) inside disposable 2ml screw cap microtubes. Optimized mixing motion causes rapid cell disruption through constant high velocity impact from hardened micro-beads chosen specifically for your sample type.

Developed for samples too tough to be homogenized in a common lab vortexer, BeadBug provides a convenient and economical alternative to traditional homogenizers. With up to three tube capacity and a foot print of just 7" x 8", BeadBug is the ideal homogenizing instrument for low to medium throughput laboratories.

Specifications:

Speed range: 2,700 to 4,000rpm

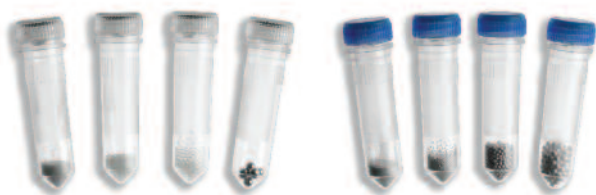
Capacity: 3 x 2ml (screw cap/non-skirted)

Timer: 3 sec. to 3 min.

Operating temperature range: +4°C to +65°C

Dimensions: 6.9" x 8.3" x 5.3"/17cm x 21cm x 13.5cm

MODEL	DESCRIPTION
D1030	BeadBug Microtube Homogenizer



Prefilled Tube Kits, non-skirted with caps

MODEL	DESCRIPTION	BEAD SIZE	QTY
D1031-01	Standard Glass Beads	Ø: 0.1mm	50/pk
D1031-05	Standard Glass Beads	Ø: 0.5mm	50/pk
D1031-10	Standard Glass Beads	Ø: 1mm	50/pk
D1032-01	Triple-Pure High Impact Zirconium Beads	Ø: 0.1mm	50/pk
D1032-05	Triple-Pure High Impact Zirconium Beads	Ø: 0.5mm	50/pk
D1032-10	Triple-Pure High Impact Zirconium Beads	Ø: 1mm	50/pk
D1032-15	Triple-Pure High Impact Zirconium Beads	Ø: 1.5mm	50/pk
D1032-30	Triple-Pure High Impact Zirconium Beads	Ø: 3mm	50/pk
D1033-28	Stainless Steel (Acid-Washed) Beads	Ø: 2.8mm	50/pk
D1032-SK	Triple-Pure High Impact Zirconium Beads Starter Kit, Ø: 0.1, 0.5, 1, 1.5 and 3mm		10 each

Digital Dry Bath



- ▶ Single, dual and four block capacity
- ▶ Dual display
- ▶ USB connectivity enables traceability of data
- ▶ Molded block chamber
- ▶ Broad temperature range up to 150°C

Incorporates the best combination of features including block capacity, dual displays, and an external temperature probe giving life science researchers the confidence and efficiency needed when working with precious samples.

Specifications:

Temperature range/uniformity: Ambient +5° to 150°C/±0.2°C

Timer: 1 min - 99 hr 59 min or continuous

Digital increments: 0.1°C/1 min

Block capacity: 1, 2 or 4 blocks

MODEL	DESCRIPTION
D1301	Digital Dry Bath Single block capacity, 8.3" x 12.4" x 4.7"
D1302	Digital Dry Bath Dual block capacity, 8.3" x 12.4" x 4.7"
D1304	Digital Dry Bath Four block capacity, 8.3" x 16.3" x 4.7"
D1101	Solid block for machining (no holes)
D1102	Block, 48 x 0.2ml PCR tubes or 6 x 0.2ml
D1102A	Block, 24 x 2ml tubes
D1105	Block, 24 x 0.5ml tubes
D1105A	Block, 24 x 1.5ml tubes
D1106	Block, 35 x 6mm tubes
D1112	Block, 20 x 12mm tubes
D1115-TALL	2 x 15ml centrifuge tubes
D1196-PCR	Single Block 96 Well Pcr Plate
D1296	Dual Block, 96 well microtiter plate or 4 slides for dual block unit only
D1296-PCR	Dual Block, 96 well PCR plate, skirted or nonskirted for dual block unit only

My Block™

A personal sized Drybath



- ▶ Compact, fits in the palm of your hand
- ▶ Exchangeable blocks, for tubes 0.2 to 50ml
- ▶ Clear hinged cover ensures temperature uniformity
- ▶ Can be used "on-the-go" wherever a 12 volt power source is available
- ▶ Touch pad control with digital display for "set and walk away" temperature selection and unrivaled accuracy

Specifications:

Temperature range: Ambient +5 to 100°C in 0.1°C increments

Temperature accuracy: ±0.5°C

Temperature uniformity: ±0.2°C

Dimensions: 4.4" x 5.9" x 4"/11cm x 15cm x 10cm

MODEL	DESCRIPTION
BSH200	MyBlock Mini Digital Dry Bath with block lifter 0 (Blocks sold separately)
BSH200-02	Block, 40 x 0.2ml or 5 x PCR strips
BSH200-05	Block, 24 x 0.5ml
BSH200-15	Block, 15 x 1.5ml
BSH200-1520	Block, 15 x 1.5 or 2ml
BSH200-150	Block, 4 x 15ml*
BSH200-500	Block, 2 x 50ml*
BSH200-A12V	Vehicle power adapter (sold separately)

*Not compatible with clear cover



MyBlock™ HL Mini Dry Bath



- ▶ Heated lid prevents evaporation and condensation
- ▶ Compact, fits in the palm of your hand
- ▶ Independent temperature control of lid and block
- ▶ Exchangeable blocks for 0.2 to 0.5ml tubes
- ▶ Room temperature to 37°C in just 2 minutes
- ▶ Ideal for temperature sensitive applications

Specifications:

Temperature range: Ambient +5 to 100°C in 0.1°C increments

Temperature accuracy: ±0.3°C

Temperature uniformity: ±0.2°C

Dimensions: 4" x 6" x 4.5"/10.5cm x 15cm x 11.5cm

MODEL	DESCRIPTION
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BSH200-HL MyBlock™ HL Mini Dry Bath with Heated Lid,

Additional blocks available, see BSH-200

Mini LabRoller™ Rotator

Economical solution for tube mixing

Compact and sleek design:

Fits easily into most incubators. Lightweight and portable, the unit is easily moved from the bench to a biological or chemical hood. Simple construction allows for easy cleaning and decontamination.

Wide range of motion:

Uniquely designed so that the level of agitation can be adjusted from gentle rolling, through two levels of tumbling, to forceful end over end mixing simply by changing the rotisserie position. When a rotisserie is inserted horizontally (tubes held vertically), an end over end motion is produced. The unit can then be used for simple rotating, or rested on either end to create a tumbling motion. Placing Mini LabRoller on end with power switch will create a more vigorous tumbling motion than resting it on opposite end. A rocking motion is achieved by simply inserting pegs to limit movement of the rotisserie to 20°, 45°, or 60°. Any of the three available rotisseries can be used as a rocking platform. Using supplied rod, rotisseries may be mounted vertically (tubes held horizontally).

Interchangeable rotisseries hold numerous tube sizes: Supplied with a rotisserie for 36 x 1.5 or 2ml tubes. Two additional rotisseries are available separately.

Specifications:

Motion/speed: Rotating, rocking, tumbling

Speed: Fixed 24/20 rpm

Operating Temperature: 4° to 40°C

MODEL	DESCRIPTION
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H5500 Mini LabRoller Rotator with rotisserie for 36x1.5/2ml tubes
 H5500-02 Rotisserie for 36x1.5ml tubes
 H5500-15 Rotisserie for 10x15ml and 12x5ml tubes
 H5500-50 Rotisserie for 6x50ml tubes

Revolver 360° Sample Mixer

Superior sample mixing

- ▶ Complete 360° rotation
- ▶ Adjustable 0-90° mixing angle

Accepts a variety of tube sizes and mixes them horizontally, vertically, or any position in between. Changing mixing angle is easy. No tools required.



Revolver with optional H5600-15 rotisserie

Interchangeable rotisseries accept tubes from 1.5ml to 50ml. Each rotisserie is split into two halves. Each half can be exchanged to mix more than one tube type at the same time and can be rotated independently from a center point on shaft. Placing the halves in line with shaft produces an end over end tumbling motion, similar to that used to mix blood tubes. Rotating rotisserie at a right angle to the shaft produces a gentle mixing motion, ideal for delicate samples. Rotation speed is fixed at 18 rpm.

Revolver with optional H5600-50 rotisserie

Molded housing, easy to clean and decontaminate. 36 x 1.5/2ml rotisserie is supplied. Other configurations available.

MODEL	DESCRIPTION
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H5600 Revolver Tube Mixer w/rotisserie for 36 x 1.5 tubes
 H5600-02 Rotisserie for 36 x 1.5/2ml tubes (included with unit)
 H5600-15 Rotisserie for 10 x 15ml tubes and 16 x 5/7ml tubes
 H5600-50 Rotisserie for 6 x 50ml tubes

Orbi-Shaker™

- ▶ Perfectly circular 19mm orbit for aeration and mixing
- ▶ Digital speed control up to 300 rpm

Features 9.5" x 8" non-slip, rubber coated platform for tissue culture flasks, petri dishes and staining trays. Additional platforms are available including the Magic Clamp™ platform for use with Erlenmeyer flasks and test tube racks.

Unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.



Specifications:

Speed range/increment: 50 to 300 rpm in 10 rpm increments

Orbit: 19mm (3/4")

Maximum capacity: 4 x 1L or 4 kg

Standard platform dimensions: 9.5" x 8"/24cm x 20cm

Dimensions: 11" x 10.7" x 5"/28cm x 27cm x 13cm

Operating Temperature: 4° to 65°C

MODEL	DESCRIPTION
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MT302-JR Orbi-Shaker JR.
 BT302-MR Magic Clamp™ universal platform (9.5x8") for flasks and tube racks (clamps sold separately)
 BT302-MR-500 Clamp for Magic Clamp platform, 500ml (max. 5)
 BT302-MR-250 Clamp for Magic Clamp platform, 250ml (max. 8)
 BT302-MR-125 Clamp for Magic Clamp platform, 125ml (max. 12)
 BT302-MR-50 Clamp for Magic Clamp platform, 50ml
 BT302-MR-1550 Tube rack for Magic Clamp platform, 12x50 and 21x15ml conical tubes (max. 1)
 BT302-P-500 Dedicated platform with 5 x 500ml Erlenmeyer flask clamps attached
 BT302-P-250 Dedicated platform with 8 x 250ml Erlenmeyer flask clamps attached
 BT302-P-125 Dedicated platform with 12 x 125ml Erlenmeyer flask clamps attached
 BT302-P-MP Dedicated platform, 4 x microplates (standard or deepwell)
 BT302-P-SP Spring rack platform, for uncommon vessels and containers



Incu-Shaker Mini



- ▶ Exceptional temperature uniformity
- ▶ Extremely compact, just 11" wide
- ▶ Exchange flask clamps in one second with the MAGIC CLAMP™ magnetic system

Incu-Shaker™ Mini is the most compact shaking incubator in its class. Despite the remarkably small footprint, a large 11.5" x 9.5" work space accepts several platforms for use with a variety of flasks, tubes and other common vessels.

Standard platform (included) features a non-slip, rubber coated surface, ideal for tissue culture flasks, petri dishes and staining trays.

Convenient MAGIC CLAMP™ platform is also available for use with Erlenmeyer flasks and test tube racks. Unique, magnetic attachment method is the easiest way to instantly change between flask clamps of different sizes.

Temperature, shaking speed and run time are displayed on large LED control panel. Integral microprocessor includes a constant monitoring system that verifies and maintains accuracy through duration of program. Sophisticated over-temperature and over-speed controls ensure long life, safety and sample integrity.

Specifications:

Temperature range: Ambient +5 to 60°C (Increments of 0.1°C)

Temperature uniformity: ±0.25 %

Temperature accuracy: ±0.1 %

Shaking speed range: 30 to 300 rpm (Increments of 1 rpm)

Shaking orbit: 19mm (3/4")

Platform dimensions: 9.5" x 11.5" / 23.5cm x 29.2cm

Exterior dimensions: 11" x 15.7" x 10.5" (lid open, height = 25")
28cm x 40cm x 27cm (lid open, height = 63cm)

MODEL	DESCRIPTION
H1000-M	Incu-Shaker™ Mini Shaking Incubator
H1000-MR	Magic Clamp™ universal platform for flasks and tube racks (clamps sold separately)
H1000-MR-500	Clamp for Magic Clamp platform, 500ml (max. 5)
H1000-MR-250	Clamp for Magic Clamp platform, 250ml (max. 8)
H1000-MR-125	Clamp for Magic Clamp platform, 125ml (max. 12)
H1000-MR-50	Clamp for Magic Clamp platform, 50ml
H1000-MR-1550	Tube rack for Magic Clamp platform, 12 x 50 and 21 x 15ml conical tubes (max. 1)
H1000-P-500	Dedicated platform with 5 x 500ml Erlenmeyer flask clamps attached
H1000-P-250	Dedicated platform with 8 x 250ml Erlenmeyer flask clamps attached
H1000-P-125	Dedicated platform with 12 x 125ml Erlenmeyer flask clamps attached
H1000-P-MP	Dedicated platform, 4 x microplates (standard or deepwell)
H1000-P-SP	Spring rack platform, for uncommon vessels and containers

Other models and capacities available online or by email.
Please visit www.BraintreeSci.com or email info@BraintreeSci.com for details and pricing.

AccuTherm™ Microtube Shaking Incubator

Peltier Technology

AccuTherm™ Microtube Shaking Incubator is a temperature-controlled vortexer using peltier technology to rapidly heat and cool important samples.

Bioscience Applications

Compact footprint incorporates an intuitive control panel with large multicolor display, allowing users to easily program and view temperature, time and speed settings. Eight interchangeable aluminum blocks accommodate PCR plates and a variety of common tube sizes, including a combination block that holds both 0.5ml and 1.5ml tubes.



Specifications:

Temp Setting: Range 0 - 105°C

Temp Control Range: Ambient -14°C to 100°C

Timer Range: 1 min - 99h 59m

Mixing Speed: 300 rpm - 1500 rpm

Mixing Orbit: 3 mm

Temp Control Accuracy: +/-0.5°C

Temp Uniformity: +/-0.5°C

Heating Time: 6.5°C/minute

Cooling Time: 1.5°C/minute

Noise Level: <60 dBA

MODEL	DESCRIPTION
I-4001-HCS	AccuTherm Microtube Shaking Incubator
I-4000-A	Block, 40 x 1.5ml
I-4000-B	Block, 54 x 0.5ml
I-4000-C	Block, 96 x 0.2ml
I-4000-D	Block, 24 x 15ml
I-4000-E	Block, Water bath (ID: 115 x 73 x 38 mm)
I-4000-G	Block, 26 x 0.5ml and 24 x 1.5ml
I-4000-H	Block, 40 x 2.0ml
I-4000-J	Block, 96 Well ELISA Plate

BenchMixer



- ▶ Powerful motor for instant vortexing
- ▶ Q-Drive™ dynamic balance system
- ▶ Touch or continuous operation
- ▶ Variable speed control from 200 to 3200 rpm

BenchMixer™ sets the standard in vortex mixing. With advanced Q-Drive™ technology, BenchMixer™ provides smooth instant vortexing of even the largest sample sizes, including full 50ml tubes.

Unique counter balance system creates maximum vortexing action, while minimizing noise and excessive vibration.

Features include: "no-walk" suction feet, cold room/incubator compatibility and spill-proof electronic controls.

MODEL	DESCRIPTION
BV1000	BenchMixer Vortex Mixer
BV1000-FLAT	Optional 3" flat head
BV1000-COMBO	Optional combination head for tubes and microplates Holds 66 tubes (38 x 1.5ml and 28x 0.5ml) or one microplate



Orbit™ 300 Multipurpose Vortexer

Three interchangeable platforms (available separately) accommodate a variety of sample containers.

Flat platform, covered with a nonslip rubber mat, holds plates, dishes, boxes, etc. Microplate platform accommodates up to four microplates. Remaining platform has spring loaded retaining bars that adjusts to hold flasks, bottles, racks and other containers in place.

Time and speed are set and displayed digitally. Large, three digit LED. Constructed of heavy gauge, coated steel for reduced motor noise and unit stability. Can be used in temperature controlled environments making it ideal for cold room or incubator use.

Specifications:

Speed range: 100-1200 rpm for gentle mixing to vigorous agitation

Timer: 0 to 99 minutes or continuous

Motion/orbit size: horizontally circular, 3mm

Maximum load: 12.3 lb/5.6 kg

Ambient operating range: +4° to 65°C



MODEL	DESCRIPTION
S2030-300	Orbit 300 Digital Multipurpose Shaker, base only
S2030-10	Platform for four microplates
S2030-12	Flat platform (30 x 30cm) with nonslip rubber mat
S2030-13	Spring loaded platform for flasks, bottles, etc.

Benchrocker



With adjustable speeds and tilt angles, user can set both parameters to match vessel size and volume of liquid being mixed. User can adjust both parameters to match vessel size and volume of liquid being mixed, yielding optimum results. Rocking speed and tilt angle are both easily adjustable in seconds. At low speeds and minimal tilt angles, both models (2D for "see-saw" motion or 3D for "gyratory" motion) provide a gentle wave effect for non-foaming mixing, as is required for most blot washing and gel work. When set to higher speeds and more extreme tilt angles, they produce aggressive agitation for vigorous sample mixing. Dual platform option expands workspace.

BenchRocker 2D and 3D can accept stackable platforms (2.75" clearance). All platform mats are autoclavable. Both models have maintenance free brushless motors and are safe for use in cold rooms and incubators.

MODEL	DESCRIPTION
BR2000	BenchRocker 2D variable speed rocker with flat mat platform
BR2000-SK	Optional stacking platform (14"x12") with flat mat
BR3D2300	BenchRocker 3D variable speed rocker with dimpled and flat mats
BR1000-SK	Optional stacking platform (12"x12") with flat mat
BR1000-SK-D	Optional stacking platform (12"x12") with dimpled mat
BR0718	LaBungee™ elastic tie downs with hooks, pack of 4

Vortex Mixer VX-200

Unique CombiCup™ head has a nonslip surface and accepts single or multiple tubes of various sizes



- Powerful, reliable motor
- Optimized counter balance system minimizes vibration
- Circular orbit for effective vortexing at any speed
- Standard CombiCup™ accepts a variety of tube sizes
- Full range of accessories

Mix and vortex any size tube

Provides fast, efficient mixing with minimal vibration. Features a true circular orbit that allows for even distribution of vortexing across the entire speed range. A full range of accessories is available to accommodate most common laboratory tubes and plates. Continuously variable speed is useful for a variety of applications, from gentle mixing to resuspending pellets. The unit has a circular orbit, rather than elliptical allowing a vortexing motion to be achieved even at low speeds. Can be operated in either "touch" or continuous mode. When in "touch" mode, the motion is activated by depressing sample head and stopped by removing pressure. "On" position will operate continuously until turned off. CombiCup™ head can be used with a single tube or a whole handful. Unique over molding technology provides a sturdy plastic core surrounded with nonslip TPE. Optional heads available.

Specifications:

Speed range: 0-3, 400 rpm Vortex a single tube or a handful with the operating modes touch or continuous

Ambient operating range: 4° to 65°C Nonslip TPE

MODEL	DESCRIPTION
S0200	Vortex Mixer
Optional Heads	
S0200-21	24 x 1.5/2ml tubes, 24 x 0.5ml tubes and 32 x 0.2ml tubes (or 4 PCR strips)
S0200-22	1 microplate or 64 x 0.2ml tubes or 8 PCR strips
S0200-23	8 x 15ml and 8 x 12/13mm diameter tubes continuously
S0200-24	6 x 50ml tubes adjustable variable
S0200-25	12 x 1.5/2ml tubes, held horizontally
S0200-26	4 x 15ml tubes, held horizontally
S0200-27	2 x 50ml tubes, held horizontally

Other models and capacities available online or by email.
Please visit www.BraintreeSci.com or email info@BraintreeSci.com for details and pricing.



Multi-Therm™ Temperature Controlled Vortexer

Cool – Heat – Shake

- ▶ Temperature control from 0° to 100°C
- ▶ Exchangeable blocks for tube sizes 0.2 to 50ml
- ▶ Precision contoured wells for uniform thermal transfer
- ▶ Two models: heat/cool or heat only

All popular tubes and plates are compatible, including as many as six 50ml tubes. Speed, time and temperature settings are continuously visible on the LCD, simultaneously showing both actual and selected values. Integral over-temperature control ensures long life, safety and sample integrity.

Specifications:

Temperature range (HC): Ambient 20° to 100°C

Temperature range (H): Ambient +5° to 100°C

Ramp rate: Heating: 5.0°C/min.; Cooling: 2.5°C/min. (HC only)

Temperature accuracy: ±1.0°C

Speed range: 200 to 1500 rpm, or "off"

Motion/orbit: Horizontally circular/2mm

Capacity: Per selected block

Dimensions: 8.25" x 11.5" x 8.25"/21cm x 29cm x 21cm



MODEL	DESCRIPTION
H5000-HC	MultiTherm Shaker with heating and cooling
H5000-H	MultiTherm Shaker with heating only

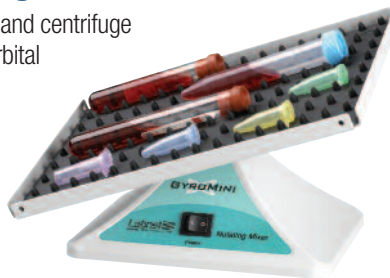
Blocks separately:

H5000-02	Block, 96 x 0.2ml or one PCR plate
H5000-05	Block, 54 x 0.5ml
H5000-CMB	Block, combination 15 x 0.5ml and 20 x 1.5ml
H5000-15	Block, 35 x 1.5ml
H5000-20	Block, 35 x 2ml
H5000-12*	Block, 24 x 12mm (200 to 1200 rpm/Ambient -10° to 100°C)
H5000-150*	Block, 12 x 15ml (200 to 750 rpm/Ambient -10° to 100°C)
H5000-500*	Block, 6 x 50ml (200 to 750 rpm/Ambient -10° to 100°C)

*Note: The larger mass of this block results in a reduced speed and temperature range.

GyroMini Nutating Mixer

Ideal for mixing samples in blood and centrifuge tubes. Combines motions of an orbital shaker and a rocker to produce a three dimensional action. The result is a thorough yet gentle mixing without foaming. Both speed and tilt angle of this small shaker are fixed to provide the optimal level of agitation for mixing samples in small containers. Supplied with a dimpled mat for holding tubes firmly in place. For temperature sensitive samples, the GyroMini can be used in a cold room.



Specifications:

Speed range: 24 rpm

Motion/ Pitch: 3-D/fixed 20°

Maximum load: 1.75 lb/0.8 kg

Ambient operating range: +4° to 65°C

Dimensions: 9.75" x 7.5" x 7"/24.8cm x 19.1cm x 17.8cm

MODEL	DESCRIPTION
S0500	GyroMini Nutating Mixer with dimpled rubber mat

New! TC 9639 Thermal Cycler

- ▶ Intuitive touch screen control
- ▶ 0.2ml tubes or strips (96)
- ▶ Program Wizard - quick, easy and foolproof
- ▶ 0.5ml tubes (39)
- ▶ Unique multi-format block
- ▶ 96 well plate (1)



Consistent, reliable results. Large, full-color, touch-screen. Program wizard and 10 preinstalled programs make it easy to get up and running.

From "Home" screen, simply touch an icon to view the last run program, enter the program library, or use the program wizard to quickly enter a protocol. Icons for favorite programs can be added for faster access.

Program wizard guides user through quickly setting up a protocol in a single screen.

Fully adjustable heated lid prevents condensation and evaporation of samples. Programmable lid temperature. When block temperature is below 35°, lid automatically shuts off. Heating and cooling of block are controlled within exceptionally tight tolerances.

TC 9639 accepts 96 x 0.2ml tubes, a 96 well plate or 39 x 0.5ml tubes in the same sample block. An in-situ adapter is available for use with slides. May be purchased with a 384 well sample block.

MODEL	DESCRIPTION
T5000-96	TC 9639 with multi-format block
T5000-384	TC 9639 with 384 well block
T5000-A-IS	In-Situ Adapter, for T5000-96

*Includes US plug, for EU plug, please add (-E) to the item number.

New! myGel™ Mini

Accuris myGel Mini electrophoresis system includes gel box power supply and casting sets. Quick and easy gel casting, no clamps or spacers required.



Attaches directly to power supply for a secure connection. Selectable parameters include 3 preset voltages - 35V, 50V or 100V - and a 99 minute timer.

Safety lid is vented to help dissipate heat generated during electrophoresis. Current runs through system only when lid is properly in place.

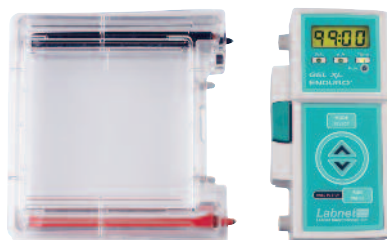
Includes trays and casting stands for both 10.5 x 6cm and 5 x 6cm gels and double-sided combs. Smaller tooth combs are compatible with multichannel pipettes. Trays feature a dark contrast strip to help visualize wells while loading and lines that fluoresce under UV and blue light to track progress of the run.

MODEL	DESCRIPTION
E1101	MyGel Mini Electrophoresis System includes E1101-Cs1 and E1101-CS2
E1101-SK	MyGel Mini Starter Kit, includes E1101 mini digital balance and 100g of LE agarose
E1101-CS1	Casting set for 10.5 x 6cm gels, includes two trays and two combs (22*/12 teeth)
E1101-COMB1	Reversible combs, 22*/12 teeth for E1101-CS1 casting set (2/pk)
E1101-CS2	Casting set for 5 x 6cm gels, includes four trays and two combs (18*/10 teeth)
E1101-COMB2	Reversible combs, 18*/10 teeth for E1101-CS2 casting set, (2/pk)

*Multi-channel pipette compatible

Enduro® Gel XL

- ▶ Control – set voltage, amperage and time
- ▶ Flexibility – runs 6 x 6cm to 12.5 x 12cm gels
- ▶ Throughput – up to 112 samples at once
- ▶ Convenience – casting set and combs included



Includes gel trays, combs, casting stand, gel tank and digital power supply. Molded migration tank, gel trays and multichannel combs for leak-proof performance and long life. Direct connection of power supply into gel box eliminates need for power leads.

Pressing eject button separates the gel box and power supply. Power supply can be set to either constant voltage or constant current with automatic crossover between the two parameters. Large digital display. Cassettes protect fragile electrodes from damage and allow for easy replacement.

Magnetic sensor allows current to flow to electrodes only when lid is in place. Box lid is vented to dissipate heat produced during electrophoresis. Clear window over gel platform aids in visualizing gel while unit is running.

Specifications:

Output: voltage/current 10V to 150V/10 to 400 mA

Timer: 0-99 hr or continuous, audible alert

Program memory: Last programmed parameters saved

Electrical universal: 100V- 240V, 50/60 Hz

Overall Dimensions: 10" x 6.7" x 2.5"/24.5cm x 17cm x 6.2cm

Gel Capacity: 1 large (12.5 x 12cm), 2 small (12.5 x 6cm), 4 micro (6 x 6cm)

MODEL	DESCRIPTION
E0160	Enduro Gel XL Electrophoresis System, includes gel tank, power supply and standard casting set
E0161	Large Gel Tray Set (12.5 x 12cm), pack of 2
E0162	Small Gel Tray Set (12.5 x 6cm), pack of 2
E0163	Micro Gel Tray Set (6 x 6cm), pack of 4
E0164	Large Comb Set, 14/28 teeth, reversible, pack of 2
E0165	Small Comb Set, 5/8 teeth, reversible, pack of 2
E0166	Micro Casting Set, includes 4 micro gel trays, 2 small combs and a casting stand
E0167	Casting Stand, for all gel sizes
E0168	Standard Casting Set, includes 1 large and 2 small gel trays, 4 large combs and a casting stand

New! Mouse/Mammalian Genotyping Kit

- ▶ DNA extraction and amplification in 1 hour
- ▶ Optimize proprietary lysis buffer
- ▶ Single tube - no organic solvents or clean up procedures
- ▶ Enhanced Accuris Hot Start Polymerase included

Quick and easy to use - add sample to the proprietary lysis buffer and incubate for 5-10 minutes, then add the deactivation buffer and incubate for 10 minutes. The crude lysate can then be amplified using fast PCR Accuris Hot Start Taq Master Mix with red loading dye (included).

Accuris™ 1 Hour Mammalian Genotyping Kit Workflow



Lanes 1, 2, and 3 compare the Accuris™ 1 Hour Mammalian Genotyping Kit with traditional methods for 3mm mouse tail snips. Lane 1 - Accuris Kit, 1 hour workflow. Lanes 2 and 3 - traditional Proteinase K digestions and PCR with Taq polymerase mix, overnight incubation. Lanes 4-7 - Replicate PCR amplification from mouse ear tissue (2.5mg) using the Accuris kit showing reproducibility.

MODEL	DESCRIPTION	REACTIONS
PR1300-MG-80	Accuris 1 Hour Mammalian Genotyping Kit . . .	80
PR1300-MG-400	Accuris 1 Hour Mammalian Genotyping Kit . . .	400

Enduro® MiniMix

Perfect for western blots

- ▶ Designed for processing blots and staining gels
- ▶ Optimal fixed speed and tilt
- ▶ Enduro Blot boxes are perfect for protein gels



Combines motions of an orbital shaker and a rocker to produce three dimensional action which is gentle and thorough.

Tilt angle is large enough to provide thorough distribution of solutions, yet small enough to keep the center of blot from drying out. Minimal amounts of solution can be used, conserving valuable probes and antibodies.

Non-slip rubber mat helps keep boxes in place on platform. Housing and platform are easy to clean and decontaminate when needed. For temperature controlled incubations, the Enduro MiniMix may be used in a cold room or an incubator. Lightweight, compact and easily moved where needed.

Available in two sizes: Small boxes have a capacity for 3-5ml of solution and are perfect for mini protein gels, such as those used in the Enduro Mini PAGE System; Large boxes will hold 6-10ml and are sized for larger mini protein gels. Boxes are acrylic and feature a hinged lid with a positive catch. Supplied in packages of 10.

Specifications:

Speed: 18 rpm/20 rpm

Motion: 3D, nutating

Angle: 5°

Ambient operating range: +4° to 65°C

Dimensions: 8" x 7" x 4.5"/20.3cm x 17.8cm x 10.5cm

MODEL	DESCRIPTION
S0600	Enduro MiniMix 3D Shaker with 20 x 16.5cm tray and non-slip rubber mat
E2110-BBS	Enduro Blot box, 9.1 x 6.6cm, 3-5ml capacity, 10/pack
E2110-BBL	Enduro Blot box, 11.7 x 8.9cm, 6-10ml capacity, 10/pack

New! Hot Start Taq DNA Polymerase and Master Mix

- ▶ Exceptional sensitivity for low copy PCR
- ▶ Ideal for multiplex PCR and amplification of GC-rich DNA
- ▶ Curis Taq Polymerase
- ▶ Buffer optimized for fast cycling and reproducibility

Engineered for controlled polymerase activity, Accuris Hot Start Taq is bound with a monoclonal antibody that blocks enzyme activity allowing reactions to be set up at room temperature without the risk of non-specific amplification. When samples are ready, reaction mixture is heated to 95°C to denature antibody and initiate reaction. Hot Start Taq is provided with a 5X buffer, or in a ready to use 2X Master Mix. Master Mix can be ordered with or without a red gel loading dye.



Gel image shows exceptional sensitivity of Accuris™ Hot Start Taq Polymerase with 405bp plant mitochondrial DNA. Amplification was performed with decreasing amounts of starting material, from 500ng to 31.25ng.

MODEL	DESCRIPTION	VOLUME
PR1000-HS-500	Taq DNA Polymerase	500u (5u/μl)
PR1000-HS-1000	Taq DNA Polymerase	1,000u (5u/μl)
PR1000-HS-6000	Taq DNA Polymerase	6,000u (5u/μl)
PR1001-HS-200	2x Taq Master Mix	200 x 50μl Reactions
PR1001-HS-1000	2x Taq Master Mix	1,000 x 50μl Reactions
PR1001-HSR-200	2x Taq Red Master Mix	200 x 50μl Reactions
PR1001-HSR-1000	2x Taq Red Master Mix	1,000 x 50μl Reactions



Spectrafuge 24D Digital Microcentrifuge

- ▶ Complete with easy access, 24 x 1.5/2ml rotor
- ▶ Set and view speed in rpm or g-force
- ▶ Digital set and display of parameters
- ▶ Quiet and cool running

Easy-access 24 x 1.5ml rotor is supplied with the Spectrafuge 24D.

Innovative rotor places tubes on a plateau, where user can easily grip their tops. Powerful brushless motor quickly accelerates rotor to a maximum speed of 13,300 rpm/16,000 x g. Controls are simple, consisting of only two knobs. Speed knob is used to set speed in either rpm or g-force. Pressing knob toggles display between rpm and rcf. Turning timer knob sets time parameter, while pushing it starts and stops operation of unit. Last run settings remain in memory allowing for repetitive centrifuging without resetting of parameters. Available in five accent colors.



Specifications:

Speed range: 500 rpm to 13,300 rpm

Maximum RCF: 16,300 x g

Maximum capacity: 24 x 1.5/2ml

Timer: 0-30 minutes or continuous "Quick" button for momentary operation

Dimensions: 9.25" x 11.5" x 8.5"/23.5cm x 29.3cm x 21.6cm

MODEL	DESCRIPTION
C2400-B	Spectrafuge 24D blue accents
C2400-T	Spectrafuge 24D teal accents
C2400-P	Spectrafuge 24D purple accents
C2400-R	Spectrafuge 24D red accents
C1205	Adapters for 0.5/0.6ml tubes, pack of 8
C1206	Tube adapters for 0.4/0.25ml tubes, pack of 8
C1222	Tube adapters for 0.2ml, pack of 8

Spectrafuge™ Mini

Ideal for quick spin downs and micro filtration. Supplied with a 6 x 1.5/2ml rotor and adapters for 0.5 and 0.4ml tubes as well as a rotor that will hold 2 x 0.2ml strip tubes. On/off switch allows user to stop motion of rotor before opening centrifuge lid. Lid hinge design incorporates a stainless steel pin for durability.

Includes microtube rotor, strip tube rotor, adapters for 0.5ml and 0.4ml tubes. Available in five translucent lid colors.



Specifications:

Max speed/g-force: 6000 rpm/2000 xg

Capacity: 6 x 1.5/2ml tubes, 2 x 0.2ml strip tubes

Dimensions: 6" x 6" x 4.5"/153mm x 153mm x 102mm

MODEL	DESCRIPTION
C1301-S	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor, 0.5 and 0.4ml adapters, smoke gray lid
C1301-B	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor, 0.5 and 0.4ml adapters, blue lid
C1301-T	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor, 0.5 and 0.4ml adapters, teal lid
C1301-P	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor, 0.5 and 0.4ml adapters, purple lid
C1301-R	Spectrafuge Mini with 1.5/2ml rotor, strip tube rotor, 0.5 and 0.4ml adapters, red lid

Prism Mini

Self opening lid: Transparent lid for a clear view of samples. Start/stop can be controlled by either on/off switch or by activating self-opening lid.

Quick release rotors: Supplied with two rotors. 8 place tube rotor accommodates 1.5/2ml tubes and a 4 place strip rotor accommodates 4 x 0.2ml tube strips or 32 individual PCR tubes. Rotors have a quick release hub design. No tools required to exchange the rotors.

Opening lid brings rotor to quick and soft stop without disrupting samples.



Specifications:

Maximum speed: 6000 rpm/2,000 xg

Capacity: 8 place tube rotor and 4 place PCR strip rotor

Dimensions: 5.2" x 5.2" x 4.4" / 13.2cm x 13.2cm x 11.2cm

MODEL	DESCRIPTION
C1801	Prism Mini Centrifuge, 120V0
C1205	8 Adapters for 0.5 ml tubes
C1206	8 Adapters for 0.4 ml tubes
C1222	8 Adapters for 0.2 ml tubes,

My Fuge 12



- ▶ COMBI-Rotor™ can run 12 microtubes and 4 PCR strips simultaneously
- ▶ Twice the capacity of traditional mini centrifuges
- ▶ Near silent operation
- ▶ Starts and stops with opening/closing of lid
- ▶ Eliminates the need to change rotors when switching between microtubes and PCR strips

Specifications:

Speed: 5,500 rpm/2,000 xg, quick acceleration/deceleration

Capacity: 12 x 1.5/2ml tubes, 32 x 0.2ml PCR tubes
4 x PCR strips (8 x 0.2ml)

Dimensions: 5.5" x 7.9" x 4.4"/14 cm x 20cm x 11.2cm

MODEL	DESCRIPTION
C1012	MyFUGE Mini Centrifuge, with COMBI-Rotor for microtubes and PCR strips/tubes
C1008-A5-6	Adapters, 0.5ml, pack of 6
C1008-A2-6	Adapters, 0.2ml, pack of 6

My Fuge Mini



- ▶ Eight position microtube rotor
- ▶ Storage compartment for PCR rotor
- ▶ Starts and stops in just seconds
- ▶ Ideal for quick spin downs

Includes increased capacity eight position microtube rotor. A second rotor for 0.2ml PCR tubes and strips is included and stored with rotor removal key in a convenient compartment on bottom of the centrifuge. *All include microtube rotor, PCR rotor, 0.5ml and 0.2ml adapter*

Specifications:

Speed: 6,000 rpm/2,000 xg, quick acceleration/deceleration

Capacity: 8 x 1.5/2ml tubes, 16 x 0.2ml PCR tubes, 2 x 0.2ml PCR strips

Dimensions: 4.5" x 5.9" x 4.5", 11.4cm x 15cm x 11cm

MODEL	DESCRIPTION
C1008-B	MyFUGE Mini Centrifuge, blue lid
C1008-C	MyFUGE Mini Centrifuge, clear lid
C1008-G	MyFUGE Mini Centrifuge, neon green lid
C1008-P	MyFUGE Mini Centrifuge, purple lid
C1008-R	MyFUGE Mini Centrifuge, red lid



Liquid Nitrogen Cooled Mini Mortar and Pestle Set

- ▶ Permits grinding of smaller amounts of tissue right in a 1.5ml microcentrifuge tube resulting in reduced sample loss and collection time
- ▶ Prevents tube from cracking by eliminating direct contact with liquid nitrogen
- ▶ Includes 5" long stainless steel pestle with 4"W (10.2cm) x .75"D (1.9cm) polyethylene handle
- ▶ Removable, insulated mortar handle, 4"L (10.2cm)



Freeze and process tiny tissue samples within a microcentrifuge tube. Mortar is suspended above a stainless steel cavity which holds liquid nitrogen and is nested in a heavily insulated blue polyethylene housing.

MODEL	DESCRIPTION
372600100	Liquid Nitrogen Cooled Mini Mortar and Pestle Set

CoolCube™

Microtube and Microplate Cooler

Stores samples safely on lab bench without sample degradation due to temperature increase or fluctuation. Constructed of DuraStar (a high strength polymer) and a proprietary gel refrigerant, CoolCube maintains temperature at approximately 0°C for up to four hours.



Simply place the CoolCube in a freezer overnight and it's ready for use, keeping samples cool and safe at the bench, without messy ice buckets or wet tubes.

One side of CoolCube can be used as a convenient PCR workstation, with wells for 10 standard 1.5/2ml microtubes and one 96 well PCR plate or 0.2ml tubes/strips. The other side can be used to hold 36 standard 1.5/2ml microtubes.

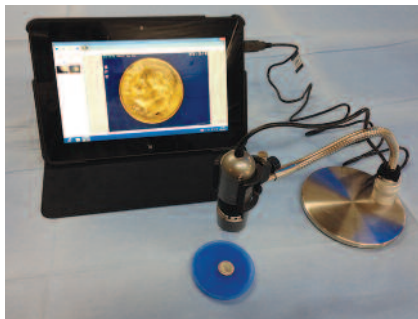
MODEL	DESCRIPTION
R1000	CoolCube Microtube and PCR Plate Cooler



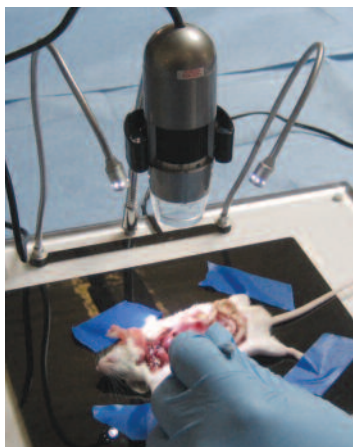
Magnification and Illumination

Portable Digital Microscope/Camera

Equip your surgery platform with a portable digital microscope/camera



Capture a photo, real time video, time-lapsed video, project image.



Ideal for small rodent surgery, demonstrations, dissections and much more!

Features a 2.0 USB connection eliminating the need for interface cards or expensive software. Easy and convenient to load and use DinoCapture application software and user's manual are included for collection and processing of photos.

- ▶ Resolution: 640 x 480 pixels
- ▶ Magnification: 10~200x continuous
- ▶ Sensor: 1/4" Color CMOS
- ▶ Video frame rate: up to 30 frame-per second
- ▶ Illumination: built-in 8 white LEDs
- ▶ CD Content: DinoCapture application software, users manual
- ▶ Automatic or manual color balance and brightness control

System Requirements:

- ▶ Compatible Windows 2000/XP, Vista and most MAC OS
- ▶ Intel Pentium III 1 GHz processor or faster
- ▶ 256 MB RAM
- ▶ CD-ROM drive
- ▶ 16-bit color display monitor or higher
- ▶ Available hi-speed USB 2.0 port

MODEL	DESCRIPTION
PDMC	Digital Microscope/Camera includes mounting bracket (DMCB), DinoCapture software, USB 2.0 extension
DMCB	Bracket for Microscope/Camera (PDMC)
TSPCK	Thermo Surgery Platform/Camera Kit includes thermo surgery platform with gel-pads, digital microscope/camera, mounting bracket (DMCB), DinoCapture software, USB 2.0 extension
SSPCK	Standard Surgery Platform/Camera Kit includes standard surgery platform, digital microscope/camera, mounting bracket (DMCB), DinoCapture software, USB 2.0 extension



Zoom Stereomicroscopes

Provides sharp 3-D imaging

Available with a variety of stand and illumination choices; the standard optical configurations give 7 - 45x with 10x eyepieces. Magnification range can vary from 2.1x to 225x depending on the combination of eyepieces and auxiliary objective lenses selected. Available with a wide variety optical, stand and illumination options. For temperature sensitive work such as fertility or insemination applications, models with cool-burning fluorescent bottom illumination to eliminate overheating specimens is recommended.



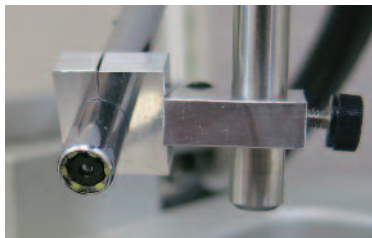
- ▶ Parfocal zoom stays in focus over entire zoom range
- ▶ Superior optical design with crisp resolution
- ▶ Heads rotate 360°, and lock in-place with thumb screws
- ▶ Eyepieces are inclined at a 45° angle for viewing comfort
- ▶ Dual-Diopter, independent focus controls on each eyetube
- ▶ Interpupillary distance adjustment of 55mm to 75mm
- ▶ Working distance of 108mm (with standard optical configuration)
- ▶ All metal head, stand and body construction

MODEL	DESCRIPTION	STAND	ILLUMINATION
ZM181	Binocular	Pillar/Post	None
ZM181T	Trinocular	Pillar/Post	None
ZM181HF	Binocular	Pillar/Post	Halogen (top) Fluorescent (bottom)
ZM181HFT	Trinocular	Pillar/Post	Halogen (top) Fluorescent (bottom)
ZM184HF	Binocular	Extender Arm	Halogen (top) Fluorescent (bottom)
ZM184HFT	Trinocular	Extender Arm	Halogen (top) Fluorescent (bottom)

Options and accessories available online at BraintreeSci.com or email info@BraintreeSci for details and pricing.

New! Camera System with Mounting Brackets

Camera system mounts to a standard stereotaxic instrument via a standard V-mount. The camera enhances placement accuracy by allowing for a close-up view working area.



Specifications:

CMOS Sensor: 2.0M pixels

Still Image Resolution:

up to 1600x1200 pixels,

Format: JPG, BMP

Video Resolution: up to 1600x1200 pixels,

Format: AVI, Frame Rate: up to 30FPS

Focal Distance: 5mm – infinity

Magnification: 5X - 270X

Illumination: 6 white LEDs with adjustable brightness

PC Interface: USB 2.0

USB Cable Length: 200cm



MODEL	DESCRIPTION
CS-101	Camera System with Mounting Brackets

Magnifying Surgical Loupes

Quickly improves vision and corrects poor posture

To choose the right product:

A higher magnification surgical loupe reveals incredible detail but comes with small field of view. User should choose a higher magnification to focus on a narrow work area and to see details that a higher magnification affords.



Lower magnification results in wider field of view and enables user to monitor a broader work area. Because of the greater depth of field, the surgical loupe allows more freedom of movement as they are less sensitive to changes in working distance.

Working Distance: Working distance is approximate distance between users eyes and object user is working on. To choose a pair of surgical loupes with correct working distance, imitate the circumstances of a surgical procedure and try measuring working distance. Keep back straight and be in a comfortable working position. People below 5'7" usually need loupes with 340mm working distance while taller person needs loupe with 420mm working distance in a sitting position.

Illumination: Super bright LED light attaches to surgical loupes for hard to light areas. Two intensity levels and adjustable power at each level. User will find it hard to look into the illuminated area at maximum power setting. Battery can run for 7 hours continuously at lower level or 4 hours at high level. Light weighs only 11g and illuminates a spot with 70mm diameter from 400mm with 6000 K (pure white) color.

MODEL	DESCRIPTION	MAGNIFICATION	WORKING DISTANCE
ML-662	Clip-on surgical loupes double hinge, flip-up design (glasses not included)	2.5x	340mm
ML-672	Clip-on surgical loupes double hinge, flip-up design (glasses not included)	3.5x	340mm
ML-611	Sports frame with glasses double hinge, flip-up design	2.5x	340mm
ML-613	Sports frame with glasses double hinge, flip-up design	2.5x	420mm
ML-623	Sports frame with glasses double hinge, flip-up design	3.5x	340mm
ML-625	Sports frame with glasses double hinge, flip-up design	3.5x	420mm

New! DermaScout™

Used to view, measure and monitor skin lesions, fungal infections, tumors, warts and other conditions that may affect the epidermis.

- ▶ 6x magnification with 40mm top lens
- ▶ Diopter focus control for sharp focusing
- ▶ 40mm field of view (flat field), 31mm working distance
- ▶ LED illuminated with an array of 9 LEDs
- ▶ Over 150 hours of battery power with included battery
- ▶ Reticule with dual measuring scales: millimeters and inches
- ▶ 20mm, 10 left of center/10 right of center
- ▶ Measure in 0.1mm/0.05"
- ▶ Durable locking transport and storage case

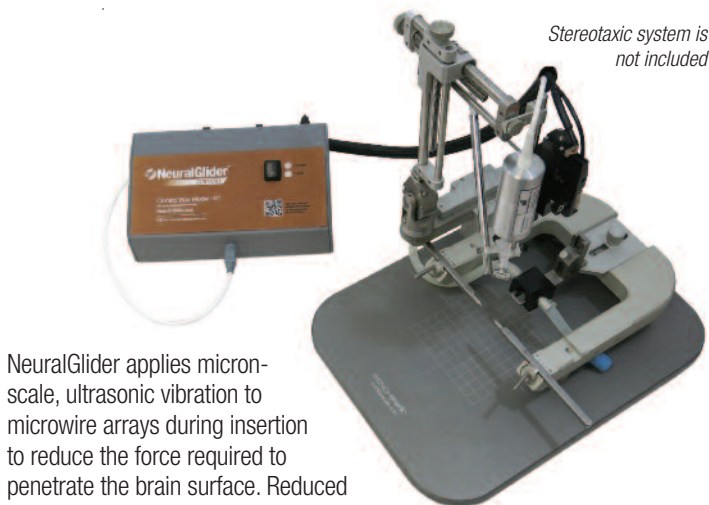


MODEL	DESCRIPTION
DS-6-02	DermaScout™



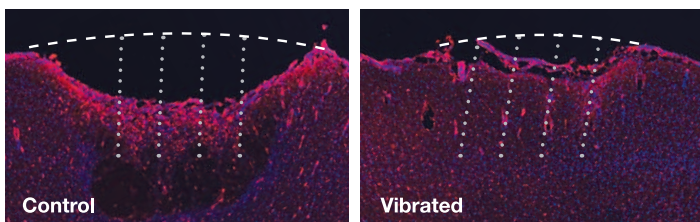
New! NeuralGlider-Cortical Neural Implant Insertion System

Reduces insertion trauma and improves placement accuracy of penetrating neural implants



NeuralGlider applies micron-scale, ultrasonic vibration to microwire arrays during insertion to reduce the force required to penetrate the brain surface. Reduced insertion force facilitates slow (0.1 mm/s), accurate array insertions while minimizing displacement/dimpling of the cortical surface, preserving the integrity of the underlying neural tissue.

- ▶ Reduced insertion force and tissue dimpling yielding less insertion damage and neuron loss
- ▶ Integrated software for control of insertion velocity and depth
- ▶ Improved insertion of fixed microwire arrays



Compared to a standard control insertion (left), NeuralGlider reduced cortical surface damage and blood brain barrier leakage (IgG staining, red) at the microwire array insertion site (right). Images showed 20 μ m rat cortical sections, 2 weeks after implantation with 2x4, 50 μ m microwire arrays.

MODEL	DESCRIPTION
NG-101	NeuralGlider-Cortical System

Cunningham™ Mouse and Neonatal Rat Adaptor

Fits Stoelting Lab Standard™ and most other brands of stereotaxics. It employs light, tapered Delrin® ear bars, to facilitate surgery on mice and rat pups.

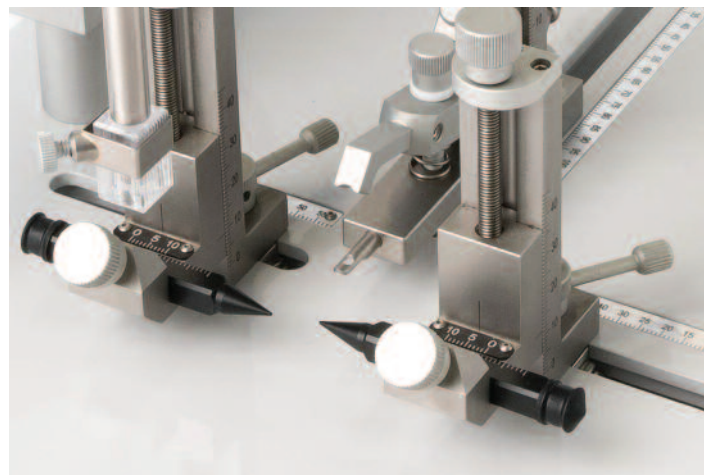
Features an increased overall length to accommodate larger animals, and specialized jaw holder cuffs, providing an alternative non-invasive means of securing the animal's head in the stereotaxic stage. Fully compatible with masks for gas anesthesia.



MODEL	DESCRIPTION
51625	Neonatal Rat Adaptor

New Standard™ Stereotaxic Instrument for Rat and Mouse

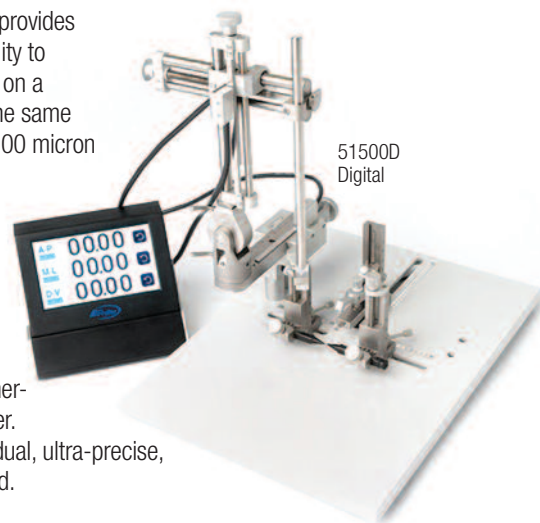
Revolutionary design eliminates the U-frame allowing for greater flexibility and access to the animal



- ▶ No U-frame maximizes operating space
- ▶ Designed for a rat or mouse on the same base
- ▶ Vertical and horizontal adjustment of ear and nose posts accommodates rodents of all sizes
- ▶ Scales at ear and nose posts allow for precise positioning
- ▶ Equipped with integrated warming base

Innovative design provides users with the ability to perform surgeries on a mouse or rat on the same base. Includes a 100 micron 3-axes, left-hand manipulator arm, separate rate and mouse adaptors, dual sided (18° and 45°) rat ear bars, triple-point ear bars, and corner-clamp probe holder.

Also available as dual, ultra-precise, digital or motorized.



MODEL	DESCRIPTION
51500	For Rat and Mouse
51503	Dual for Rat and Mouse
51500U	Ultra-Precise Rat and Mouse
51503U	Dual Ultra-Precise for Rat and Mouse
51500D	Digital for Rat and Mouse
51503D	Dual Digital for Rat and Mouse
51500UD	Digital Ultra-Precise for Rat and Mouse
51503UD	Dual Digital Ultra-Precise for Rat and Mouse
51500M	Motorized for Rat and Mouse



Classic Lab Standard™ Stereotaxic Instrument for Rats

Multiple manipulator options available to increase resolution

- ▶ Classic U-frame design
- ▶ Interchangeable adaptors (for mice or rats)
- ▶ Gas anesthesia compatible
- ▶ Absolute lock at 90° vertical
- ▶ Available with integrated warming bas

Time-proven U-frame design provides stability and adaptability while the instrument's triple-lead screws allow for smooth, consistent movements with rapid positioning. Includes a 100 micron, 3-axes, left-handed manipulator arm, rat adaptor, traditional (18°) ear bars, and corner-clamp probe holder. Also available as dual, ultra-precise, digital or motorized. Non-puncture 45° ear bars available.

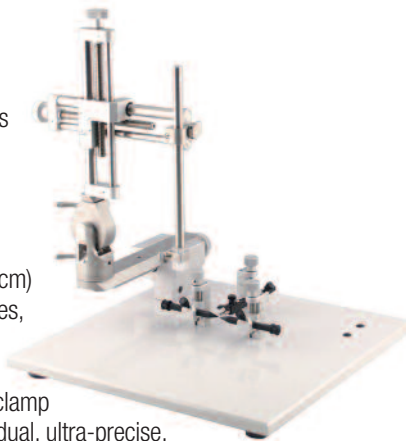
MODEL	DESCRIPTION
51600	For Rats
51603	Dual for Rats
51600U	Ultra-Precise for Rats
51603U	Ultra-Precise Dual for Rats
51900	Digital for Rats
51903	Dual Digital for Rats
51900U	Digital Ultra-Precise for Rats
51903U	Dual Ultra-Precise Digital for Rats
51700M	Motorized for Rats



Just for Mouse™ Stereotaxic Instrument for Mouse

- ▶ Dual-arm capable
- ▶ Ideal for knock-out and transgenic mice
- ▶ Multiple head-holding options
- ▶ Vertical post adjustment
- ▶ Gas anesthesia compatible
- ▶ Equipped with integrated warming base

Includes 10" x 10" (25cm x 25cm) square base, 100 micron, 3-axes, left-hand manipulator arm, triple-point mouse and ear bars, snout clamp, and corner clamp probe holder. Also available as dual, ultra-precise, digital or motorized.



MODEL	DESCRIPTION
51730	For Mouse
51733	Dual for Mouse
51730U	Ultra-Precise for Mouse
51733U	Ultra-Precise Dual for Mouse
51730D	Digital for Mouse
51733D	Dual Digital for Mouse
51730UD	Digital Ultra-Precise for Mouse
51733UD	Dual Ultra-Precise Digital for Mice
51730M	Motorized for Mouse

Just for Mice™ Stereotaxic Instrument for Mice

- ▶ Increase throughput with dual workstations
- ▶ Triple-point versatility in securing the mouse's head
- ▶ Offers multiple head-holding options
- ▶ Manipulator arm rotates 360°
- ▶ Vertical post adjustment
- ▶ Gas anesthesia compatible
- ▶ Absolute lock at 90° vertical
- ▶ Traditional 18° ear bars included. Non-puncture ear bars available

Allows researchers to hold and prepare two mice or neonatal rats at the same time. Includes a 100 micron, 3-axes, left-hand manipulator arm, two sets of triple-point mouse ear bars, 2 snout clamps, and one corner clamp probe holder. Also available as ultra-precise, digital or motorized.

MODEL	DESCRIPTION
51725	For Mice
51725U	Ultra-Precise for Mice
51725D	Digital for Mice
51725UD	Digital Ultra-Precise for Mice
51725M	Motorized for Mice



Magnifier/Multi-Device Flex Arm

Ultra-strong magnetic base/puck system to anchor magnifier on non-metallic surfaces. Attaches directly to metallic surfaces. Small Base: 1.625" dia.

Kit includes:

- ▶ 9" flex arm with magnetic base/puck
- ▶ Storage pouch with 8 devices includes: large, small and micro alligator clips, mini-grabber, card holder, universal velcro mount, Dino-Lite digital microscope holder, universal digital camera holder

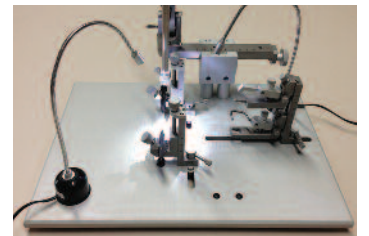


MODEL	DESCRIPTION
SMAG	Stereotaxic Magnifier
SM-FA	Stereotaxic Multi-Device Flex Arm Kit
SF-AB	Stereotaxic Multi-Device Flex Arm, does not include devices
SBLL	Steel Base for bench use

Lab Light

Unique magnetic base/puck system holds lab light firmly on base in any location. Ultra strong magnetic base/puck system allows lab light to attach to non-metallic surfaces. Plug lab light into the optional on/off plug switch for easy on/off operation.

- ▶ LED on 10" flex arm
- ▶ Attaches directly to metallic surfaces
- ▶ Universal power supply (110-220 V)
- ▶ Small base (1.625" dia.)



MODEL	DESCRIPTION
LL13	Lab Light
LLSW	On/Off Plug Switch



MouseOx® Plus Pulse Oximeter

Non invasive, used with:

- ▶ Anesthetized and conscious subjects
- ▶ Animal sizes neonate to adult mice, rats and other small lab animals
- ▶ Mice, rats and other small laboratory animals with pulse rate from 90-900 BPM such as marmosets, rabbits, guinea pigs, hamsters, voles, tree shrews, ferrets, opossum, rabbits

Provides measurements for arterial oxygen saturation, heart rate, breath rate, temperature*, pulse distention, breath distention, activity (optional).



MODEL	DESCRIPTION
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SLS-015000 Mouse Ox Plus Base System, analog output for heart rate for anesthetized monitoring ONLY, USB, universal cable, power supply and 2 sensors

Additional Options

SLS-015010 Temperature measurement: includes 6' temperature probe and software

SLS-015007 Premium Recording Module (last 2 min. chart), recording and data analysis capabilities

SLS-015002 Conscious Monitoring Module (must have SLS-015000 and SLS-015007 to work)

SLS-015003 Conscious Monitoring Enclosure, mouse

SLS-015004 Conscious Monitoring Enclosure, rat

*Via a separate sensor

MouseOx® Plus Non-invasive Sensors

- ▶ Easily applied by one person
- ▶ Monitor both anesthetized and conscious unrestrained subjects
- ▶ Monitor hypothermic and hypovolemic animals

Five sensors per pack

MODEL	DESCRIPTION	SIZE	EACH	PACK OF 5
SLS-015 020	CollarClip, conscious unshaved mice 1-20g	XS		
SLS-015 021	CollarClip, conscious unshaved mice >15g, rats 5-30g	S		
SLS-015 022	CollarClip, conscious rat 31-100	M		
SLS-015 023	CollarClip, conscious rat 101-300g	L		
SLS-015 024	CollarClip, conscious rat 301-500g	XL		
SLS-015 025	CollarClip, conscious rat >500g	2XL		
SLS-015 026	ThroatClip, anesthetized unshaved mice, 1-15g, shaved 1-20g	XS		
SLS-015 027	ThroatClip, anesthetized unshaved >15g, shaved >20g, rat 5-30g	S		
SLS-015 028	ThroatClip, anesthetized rat 31-100g	M		
SLS-015 029	ThroatClip, anesthetized rat 101-300g	L		
SLS-015 030	ThroatClip, anesthetized rat 301-500g	XL		
SLS-015 031	ThroatClip, anesthetized rat >500g	2XL		
SLS-015 032	Mouse Thigh Sensor, anesthetized mice and young rats	—		
SLS-015 033	Rat Foot Sensor, anesthetized rats >100g	—		

Original MouseOx® Systems and Sensors available online.

STARR-Link™ Analog Output Module

Output beat-by-beat MouseOx® data in analog form to another recording system.

Starr-Link™ analog output module provides real-time analog voltage outputs of MouseOx® data. STARR-Link transmits all MouseOx® data at 15 Hz, using a 0-5 VDC scale. Connects easily to computer with a USB cable. It has no external power supply and is automatically recognized by MouseOx® software. No additional software is needed.



MODEL	DESCRIPTION
SLS-000003	STARR-Link

MRI Compatible Sensor

MRI sensor plugs directly into

MouseOx Plus and MRI

sensor can be used

in both small and

large bore MRI. The

sensor is 20' long

enabling the

MouseOx Plus

and computer to be

located a safe distance from the MRI device. End of sensor contains 5' fiber optic portion to be inserted into bore. Sensor clips included to be used on animals foot or thigh.



MODEL	DESCRIPTION
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SLS-001300 Pulsar Small Bore MRI Compatible Sensor

SLS-001304 Replacement MRI Thigh Sensor

SLS-001305 Replacement MRI Foot Sensor

Automated Milker for Rat and Mouse

Ideal for the analysis of breast milk composition



Automated milker provides researchers the ability to collect rat/mouse milk directly from the teat. Collects milk from lactating mothers by alternating negative and atmospheric pressures through two solenoid valves and a vacuum pump attached to a microcomputer.

Environmental pollutants, in particular carcinogenic substances and endocrine disrupting chemicals, are a worldwide concern. The influence that these substances have on babies and their development, through breast or cow milk, is of great concern. The ability to gather milk from rats and mice, widely used experimental animals, will aid in advancement of research in this area.



MODEL	DESCRIPTION
59150	Automated Milker, Rat and Mice



VibraSearch

- ▶ Device and app detects damaging levels of vibration in animals
- ▶ Connects via Bluetooth wireless technology to each device in range. Simply place VibraSearch device inside a cage or on rack and connect via Bluetooth to VibraSearch app on any IOS device
- ▶ Small as a deck of playing cards, VibraSearch device allows users to move from room to room with ease and without tangled cords. Magnets mounted on the exterior aid in attaching device directly to metal
- ▶ Toggle effortlessly between measurement scales and display data
- ▶ Clear visualization of safe and harmful levels. App displays accurate and easy-to-interpret vibration data, also indicates whether vibration level is safe or at a level known to be harmful to animal models



Provides noise and vibration measurement for biomedical research facilities to measure vibration data regularly. Minute vibrations have been associated with changes in the behavior of animals at research facilities and laboratories. Allows researchers to collect vibration data to improve welfare of animals, thus leading to more accurate test results. VibraSearch accurately detects minute vibration data to the scale of $\pm 2g$ along the X, Y, and Z axis using an accelerometer. Data is displayed on VibraSearch app in the form of a bar graph as well as a numerical value. Using this data, researchers can determine if the animal is subject to any unsafe vibration levels.

Vibration has been identified as an animal welfare concern as well as a potential experimental confound. Problematic vibration can result from the use of Individually Ventilated Caging systems (IVCs), room-to-room transport, facility construction, nearby train lines, and many other sources. Exposure to chronic vibration has been linked to chronic stress response in mice and rats such as cortisol increases, decreased pregnancy rates, and changes in the cardiovascular function. Vibration levels less than 0.5 m/s^2 in rats and mice do not cause reliable changes in cardiovascular functions or in homeostatic cortisol levels, whereas a number of studies in both animal and human literature suggests that exposure greater than 0.5 m/s^2 can cause these significant changes. To alert facility managers of potentially harmful vibration levels, VibraSearch sends alerts when vibration levels reach 0.5 m/s^2 or higher.

MODEL	DESCRIPTION
VIBRASEARCH-1	VibraSearch

VivAlarm

Noise and ultrasonic noise are present in all research animal facilities and laboratories. Acoustic stimuli have been associated with changes in breeding and behavior, as well as a number of other physiological effects involving cardiovascular and stress pathways. The result is that such stimuli can be confounds for ANY area of biomedical research using animal models because they add variability to measurements, resulting in greater statistical ambiguity in research and the need for more animals.



Features:

- ▶ Monitor noise and ultrasonic noise in your vivarium with VivAlarm, the first 24-hour monitoring system created specifically for the animal research environment
- ▶ VivAlarm provides data logging for up to three weeks. Can be used to strengthen the credibility of users research by ensuring that animals are not being exposed to stress-inducing auditory stimuli for extended periods of time
- ▶ VivAlarm is a great way to become aware of unknown auditory stressors that humans are not able to perceive, which could likely be the cause of behavioral changes in the animals

Alert System:

- ▶ 24-hour monitoring system can send alerts via text or email to facility directors, PIs, or construction personnel
- ▶ Alerts can also send directly to OSL through VPN (Virtual Private Network), where "smart" monitoring can be provided to minimize stress of false alarms

Data Logging:

VivAlarm system collects and logs noise data for up to three weeks, allowing for review of daily and weekly noise patterns and disturbances.

For use in any Vivarium with

- ▶ Construction/remodeling
- ▶ Individually vented caging systems
- ▶ Fluorescent lighting
- ▶ Motion detectors
- ▶ Cage wash stations

MODEL	DESCRIPTION
VIVALARM1	Monitoring System
VIVALARM2	Components to allow mobilization. Includes Battery pack, digitizer, laptop & software

Hum Bug Noise Eliminator

- ▶ Eliminate 50/60 Hz noise and harmonics without filtering
- ▶ Eliminates electrical interference
- ▶ No waveform distortion



Hum Bug is a powerful device for canceling electrical interference in real-time, avoiding traditional problems associated with notch filters. Hum Bug constructs a replica of noise present on input signal and continuously subtracts replica from signal as it passes through instrument. It performs this function in the presence of biological activity even when noise characteristics evolve over time.

Hum Bug is not a filter. It does not create phase delays, amplitude errors, DC shifts or waveform distortion. Simply connect it between your preamplifier and any analysis equipment and it will automatically eliminate 50/60 Hz noise and harmonics with frequencies up to several kHz. Noise is eliminated without altering signal of interest even when frequencies within signal overlap with noise components. No settings or adjustments are required.

Hum Bug can eliminate 50/60 Hz noise from virtually any analog signal. It is equally effective at removing noise associated with inadequate grounding, ground loops, and electrical pickup. Common applications include noise elimination from signals recorded using microelectrodes, skin electrodes (EKG, EMG, EEG), high gain amplifiers, magnetic sensors, and audio equipment.

MODEL	DESCRIPTION
HUMBUG	Hum Bug Noise Eliminator



Rat Loft™

Perforated stainless steel platform that is bent to form a hook allowing loft to be hung from top lip of cage. Easy to install and can be left in cage for cleaning. Stainless steel will not rust, crack, or bend.

- Increases floor space per cage
- Stainless steel is easily cleaned and durable
- No replacement or disposal issues
- Less expensive over time than disposable and plastic devices
- Allows nursing mother rats a place of refuge from pups
- Seems to have a calming effect on rats
- Easy to install and remove
- New hinged floor design allows researcher to access rat if beneath it



MODEL	DESCRIPTION
RAT-LOFT-H	6.5"W x 3.5"D x 3.5"H, hinged perforated deck
RAT-LOFT-OS	Oversized, 6.5"W x 4.5"D x 3.5"H
RAT-LOFT-S	Small, 5"W x 3.5"D x 3.5"H, perforated deck
RAT-LOFT M	Standard, 6.5"W x 3.5"D x 3.5"H, perforated deck

Mouse Loft

The contoured tube mouse loft was developed to provide a place where the female can find relief from the frantic life on the cage floor with a litter of aggressive hungry individuals.

Contoured tube loft provides an elevated place of refuge where feed can be consumed without the constant bother of the litter. A preliminary study indicates that mice routinely using the contoured tube loft are less likely to eat the litters. Also it is anticipated that the loft will provide for the dam, freer access to the feeder resulting in less weight loss while lactating.



MODEL	DESCRIPTION
MOUSE-LOFT	Contoured Mouse Tube Loft

Cocoon Nesting Fibers



Cocoon is the latest environmental enrichment nesting and bedding product for rodents. Offers the animal an opportunity to fulfill their nesting instincts.

The fibers of the Cocoon product are very short which is safer for the

animal and allows it to create a soft nest, much like in its natural habitat.

Cocoon is whitened without chlorine. Sold 6,000 cylinders per case.

MODEL	DESCRIPTION	UNITS
COCO-087	Cocoon Nesting Fibers	6,000/cs

Refuge Mouse Hut



A comfortable and quiet place to rest, or to climb on and explore.

- Material to shred (just for fun or to build a nest), usually last 7 to 30 days
- 4"W x 4"L x 2.5"H, 3 openings
- Environmentally safe, non-toxic

MODEL	DESCRIPTION	UNITS
REFUGE-087	Refuge Mouse Hut	600/cs

Modak's Mouse Tube

Developed in conjunction with Canada's leading cancer research hospital in Toronto. This polycarbonate tube can withstand the high temperatures of an autoclave and also maintain it's shape and color. To date there are over 40,000 tubes in the field. Three year warranty.



MODEL	DESCRIPTION
MOD-TUBE	Modak's Mouse Tube

iso-PADS

iso-PADS represent the next generation of bedding materials. Flat, compressed, rectangular pads of cotton fiber material can be conveniently dropped into standard shoebox rodent cages that are meant to be used as a contact bedding.



Rodents enthusiastically shred pads into a soft, fluffy consistency which offers an unsurpassed enrichment aspect to this unique bedding product. iso-PADS are perfect for post surgical applications. Bright white pad offers great visual monitoring of leaking and bodily functions.

High Tech Bedding Material

- Eliminates variables associated with recycled or synthetic bedding products
- FDA-approved, hypoallergenic cotton-based cellulosic fibers
- Perfect companion for micro isolation units or standard shoebox cages

High Absorbency

- Absorbs more than 400% its weight in water
- Enhanced evaporation of liquids
- Controls odors better and lasts longer than traditional bedding materials
- Biodegradable and environmentally friendly
- Reduced waste volume

Color and Consistency

- Improved observation of animals and their discharges due to light color
- Minimized dust
- No pouring and no dispensers greatly reduces airborne particulates

Environmental Enrichment

- Rodents are instinctively motivated to shred iso-PADS, creating a natural nest-like environment
- Shredding provides rodents with a natural enrichment activity
- Provides material for a nest building environment
- Ideal environment for rearing young

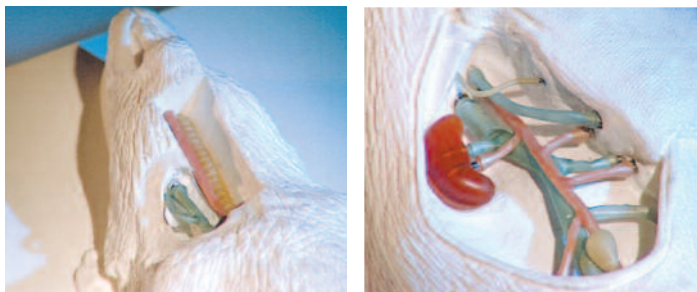
Economics and Ergonomics

- Consistent pad size insures uniform dispensing, facilitating accurate cost control accounting
- Reduced weight decreases waste disposal costs
- Improved personnel safety due to light weight and low dust
- Labor saving

MODEL	DESCRIPTION
ISO-6105	6" x 10", non sterile, bulk, 500/case



MD PVC-Rat



Microsurgical Developments PVC-Rat is an example of the replacement of living animals.

Microsurgical Developments PVC-Rat is developed to master skills in microsurgery.

Using the model during training of scientists and animal technicians, the number of live-animals needed will be reduced drastically.

It gives the possibility of training approximately 25 different microsurgical techniques (i.e. anastomoses, cannulations, transplantations of vessels and organs).

MD-PVC-Rat comes in a carrying case, together with a video-user-guide and several spare parts.

Anastomosis - The MD PVC-RAT gives the possibility of training several anastomose-techniques in situ: end-to-end, end-to-side, side-to-side.

Cannulations - The MD PVC-RAT gives the possibility of training several cannulation techniques. As described in the Manual of Microsurgery on the Laboratory Rat, one can practice the cannulation of: Jugular vein, portal vein, renal vein, ilio-lumbar artery, thoracic duct, double bile fistula

In the Portal vein of the MD PVC-RAT one can practice the Porta Caval Shunt techniques, e.g. the button technique (acc. to Funovics) or the suture technique (acc. to Lee and Fisher).

Transplantations - The following transplantation techniques can be practiced in the MD PVC-RAT: heart, kidney, blood vessels, prostheses

Most basic skills and experimental techniques are described in the Manual of Microsurgery on the Laboratory Rat.

MODEL	DESCRIPTION
MD-PVC	Model
MD-PVC	Parts

Mimolette Lab Rat

Perform endotracheal intubation, cardiac puncture, and blood collection from the saphenous vein



Mimolette lab rat was created with these key features to hopefully end the practice of using live rats for training. The laboratory rat has been used very widely in experiments. Following our ethos regarding humane

science, Mimolette is Rescue Critters® proudest creation to date. Mimolette comes complete with her own carrying case, lungs, heart, veins, artificial blood and IV accessories.

MODEL	DESCRIPTION
MIMOLETTE	Mimolette (mee-moh-let) Lab Rat

KOKEN RAT

Experiment techniques training model



When various experimental procedures are conducted using laboratory animals, it is important to restrain the animal properly and to develop techniques that will meet the necessary experimental objectives. Beginners can learn the techniques of proper

holding, peroral feeding, tail vein injection and blood collection, and endotracheal intubations.

- ▶ Pharynx, larynx, trachea, stomach, and tail vein are anatomically correct and replicated inside the model of the rat
- ▶ To achieve a texture similar to that of a live rat, original silicone and soft vinyl chloride are used
- ▶ When placed in position, the posture is the same as that of a live rat
- ▶ Dosage in stomach can be confirmed as part of abdomen is transparent
- ▶ Insertion of a needle into the tail vein can be confirmed by the reflux of the imitation blood
- ▶ Techniques include retention, peroral dosage, tail intravenous dosage and blood collection and endotracheal intubation

MODEL	DESCRIPTION
KOKEN-MODEL	KOKEN Rat Model
KOKEN-TAIL	Replacement Tail for KOKEN Rat
KOKEN-BLOOD	Replacement Blood for KOKEN Rat

New! Squeekums Rat Manikin



Allows students, lab technicians, and handlers to learn how to confidently handle and safely manage lab rodents. The tail of this rodent model can be conveniently detached and disposed of, while also having the capability of IV access at the caudal vein site. Tiny replaceable ears help students learn ear tagging procedures. Model is fully articulated and extremely realistic. Head, feet, and limbs move in a natural manner. Squeekums comes with its own protective case, IV accessories, artificial blood, and instructions.

MODEL	DESCRIPTION
SQUEEKUM-1	Rat Model
SQUEEKUM-2	Replacement Tail
SQUEEKUM-3	Replacement Ears

Skin Pads

For training and practicing core skills associated with wound closure, making an incision, application of skin adhesives, interrupted suturing and knotting, stapling. Latex free. Works with all major topical skin adhesives. Excellent for displaying variety of sutures and skin adhesives. Two sizes available.



MODEL	DESCRIPTION
ALT-00550	Skin Pad Jig
ALT-00091	Professional Skin Pad MK2, small 125mm x 72mm, pack of 4
ALT-00092	Professional Skin Pad MK2, large 145mm x 125mm, pack of 2



The CurVet™ Rat Training Simulator



Training aid designed to provide skills required for humane and ethical handling and procedural competencies, without the need to use a live animal. Made using a material that does not include latex, but gives a unique sensitivity of a living specimen.

Realistic dermatological skin, suitable for:

- ▶ Injections by most conventional routes
- ▶ Micro-chipping identification
- ▶ Handling and restraint (including the ability to scruff if required)
- ▶ The deliberate absence of fur enables this model to be cleaned and sanitized with an appropriate chemical sterilant

Head and spinal movement, including rear limbs

- ▶ Suitable for oral administration
- ▶ Lateral and ventral head movement
- ▶ Hard palate with incisors

Realistic removable tail with two lateral tail veins ideal for:

- ▶ Blood sampling
- ▶ Intravenous administration
- ▶ Insertion of a flexible catheter (Angiocath)
- ▶ Tail has a self sealing material hence long life span
- ▶ Additional tails can be purchased separately
- ▶ Artificial realistic non-toxic blood available

Realistic features such as:

- ▶ Eyes
- ▶ Hard palate with incisors
- ▶ Pink extremities
- ▶ Fore and rear limbs
- ▶ Anus and rectum with limited aperture for thermoregulation monitoring i.e. clinical or digital thermometer
- ▶ Adult rat size and weight approximately 300g

This model is NOT a toy, but a well thought out training aid to replace the use of a live animal to gain manual skill and competence, thus avoiding stress to both animal and handler.

MODEL	DESCRIPTION
CURVET	CurVet Rat Ethical Training Simulator



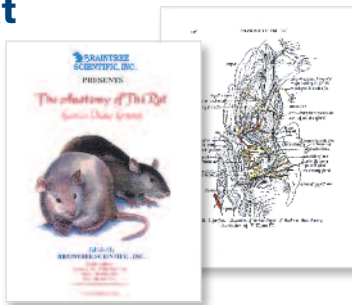
Reference Books

Anatomy of the Rat

By Eunice Chace Greene

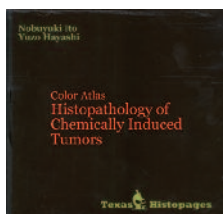
**Available only from
Braitree Scientific**

This classic book offers basic reference for all researchers using laboratory rats. It includes 339 precisely detailed presentations of the rat - numerous colorful, hand sketched skeletal diagrams provide a thorough analysis of the anatomy of a rat. The large format (8.5" x 11"), clarity of the presentations, and its spiral binding - allowing it to lay flat, contribute to this valuable researcher's assistant. Whether in the library or lying on a laboratory bench, this reference book is a valuable tool. In our opinion, no other textbook even comes close!



MODEL	TITLE
AR	Anatomy of the Rat

Histopathology of Chemically Induced Tumors - Electronic Atlas



An exact replica of the Soft Science Publications atlas published in 1987. 650 color photos and corresponding text. A unique collection of excellent color microphotographs of almost all lesions found in experimental animals treated with chemical agents. Very useful reference for experimental pathologists, cancer researchers and toxicologists.

MODEL	DESCRIPTION
CD-LALES	Histopathology of Chemically Induced Tumors

A Color Atlas of Sectional Anatomy

by Takamasa Iwaki, Hiroshi Yamashita, Toshiyuki Hayakawa

Published in Japan, September 2001 • 185 pages hardcover

Available only from Braitree Scientific

Specimens were not fixed but kept in a frozen state so that photographic information close to the living state could be obtained. All photographs are in color for detailed observation. Each atlas has numerous color pages, 2 pages of black and white macro-anatomical photographs are provided. All pages consist of photographs making detail more comprehensive and three-dimensional than the usual pictorial atlas.

The anatomical terms used are in Japanese and English.



MODEL	TITLE
SECT-MOU	A Color Atlas of Sectional Anatomy of the Mouse
SECT-RAT	A Color Atlas of Sectional Anatomy of the Rat

Handbook of Laboratory Animal Science, Volumes I, II and III

Editors - Per Svendsen Odense University, Denmark, Jann Hau, The Royal Veterinary College, London, U.K.

This three-volume set presents a comprehensive description of laboratory animal genetics, diseases, health monitoring, nutrition, and environmental impact on animal testing. It considers the ethics of animal experimentation through a complete review of European and North American legislation on the topic. It discusses alternatives to animal experiments, including the use of isolated organs, cell cultures, and computer simulations.

MODEL	TITLE
LAS-I	Handbook of Laboratory Animal Science, Volume 1
LAS-II	Handbook of Laboratory Animal Science, Volume 2
LAS-III	Handbook of Laboratory Animal Science, Volume 3



Manual of Microsurgery on the Laboratory Rat

An up-to-date didactic manual describing experimental microsurgical techniques in great detail.

Includes general information about rat, i.e. anatomy, anaesthesia and sterility and a wide range of general techniques. Experimental techniques are covered in greatest depth. All essential steps taken during operations are shown in meticulously accurate drawings making the manual an accurate instrument in teaching/studying microsurgery and microsurgical techniques.

MODEL	TITLE
MICROSURG	Manual of Microsurgery on the Laboratory Rat

The Laboratory Animal Pocket Reference Series

Created to assist anyone who works with laboratory animals. Provides the most humane and responsible care. 14 volumes are compact and comb-bound to lay flat for use in the laboratory. Contents of each includes important biological features, husbandry, management, veterinary care, regulatory concerns, and commonly used and new procedures.

MODEL	TITLE
LAB-MOUS	The Laboratory Mouse
LAB-RAT	The Laboratory Rat
LAB-CCM	Critical Care Management for Laboratory Mice and Rats ⁵
LAB-RB	The Laboratory Rabbit
LAB-GP	The Laboratory Guinea Pig
LAB-CAT	The Laboratory Cat
LAB-PRIM	The Laboratory Nonhuman Primate
LAB-HAM	The Laboratory Hamster and Gerbil
LAB-RUM	The Laboratory Small Ruminant
LAB-CAN	The Laboratory Canine
LAB-XENO	The Laboratory Xenopus
LAB-ZEB	The Laboratory Zebrafish
LAB-FER	The Laboratory Ferret
LAB-SWIN	The Laboratory Swine

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MODEL	CURRENT BOOKS
MOUS-ATL	An Atlas of Mouse Development
B7	Atlas of Prenatal Rat Brain Development
B8	BioChemical Techniques in the Heart
COMP-ATLAS	Comparative Anatomy of the Mouse and the Rat
COMP	Comparative Cardiovascular Dynamics of Mammals
B15	Experimental Animals In Biomedical Research Vol. II
GEN-MOUS	Genetically Engineered Mice Handbook
PRE-CLIN	Handbook of Pre-Clinical Continuous Intravenous Infusion
LA-ANES	Lab Animal Anesthesia
LAM-3	Lab Animal Medicine
PROC-TEC	Lab Mouse and Lab Rat Procedural Techniques
MOUS-BEH	Mouse Behavioral Testing
MOUS-PTH	Pathology of the Mouse
B16	Principles of Experimental Design for the Life Sciences
MOUS-SYS	Systematic Approach to the Evaluation of Mouse Mutations
LMH-AALAS	The AALAS Laboratory Mouse Handbook
LABMOU-HNDBK	The Laboratory Mouse Handbook
MOUS-DLX-4	The Mouse Brain in Stereotaxic Coordinates
RAT-DLX-7E	The Rat Brain in Stereotaxic Coordinates
NERV	The Rat Nervous System

Visit us online at BraintreeSci.com for new listings and detailed write-ups.



HeroRAT

Braintree Scientific, Inc. is excited to be the first corporation to solely sponsor a HeroRat®

We proudly accept this leadership position and challenge others to do the same.



Braintree Scientific is the proud corporate sponsor of "Sniffles"

We at Braintree Scientific have taken on the sponsorship of our very own HeroRat® "Sniffles". We challenge you to do the same.

Scientists envisioned the pre-dominant role of rodent species (rats and mice) in biomedical and veterinary research. Our mission is to provide new technology products, and supplies enabling its vision. We embrace the

HeroRat® concept as a novel embodiment and expansion of its central vision – the growing partnership between human and rodent species to advance scientific and biomedical knowledge, improve human and animal health, improve detection of disease and treatment options, and clean up our environment.

Why the African Pouched Rat?

- ▶ They are intelligent creatures, easily conditioned, and enjoy doing repetitive tasks when rewarded with food
- ▶ They have a highly developed sense of smell
- ▶ They have an 8-year lifespan and several productive years after the initial year of training
- ▶ They are lightweight, so they cannot set off a mine
- ▶ Compared to dogs: cheaper to breed, feed, house, maintain; and they don't get attached to one trainer.

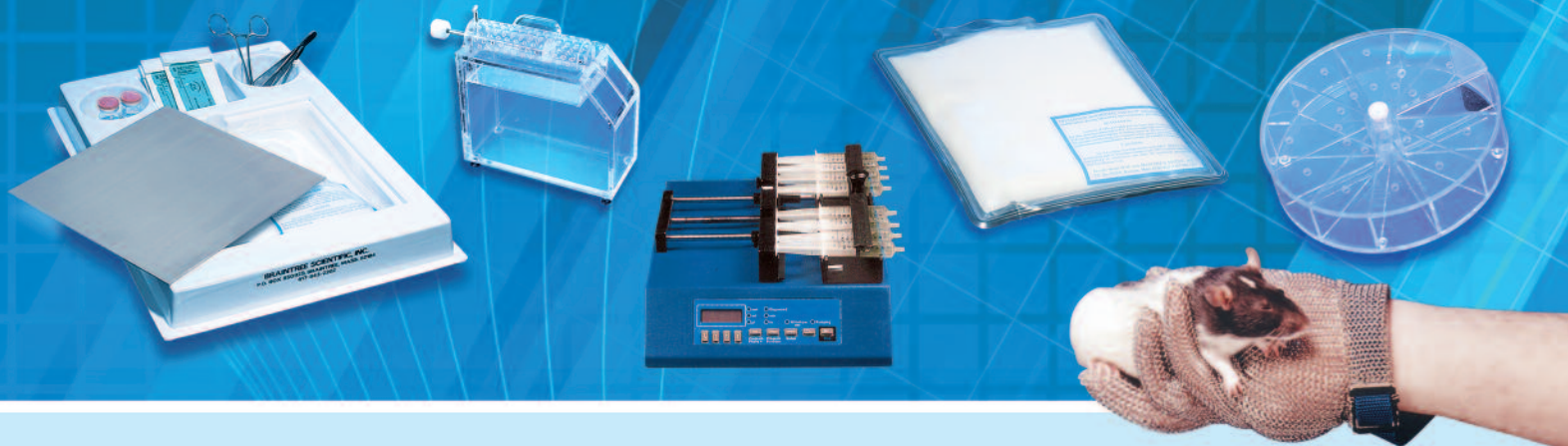


Why sponsor a HeroRAT?

Landmines injure and kill innocent people every day, and every second someone new contracts tuberculosis. These are daunting numbers, but a cost effective (tax deductible) solution exists: HeroRats®!

A HeroRat® can screen 40 samples for tuberculosis in seven minutes, equal to what a skilled lab technician can do in a day. Alternatively, two men with metal detectors can clear an average of 200 square meters in an eight-hour day while the same two men using APOPO's mine detection rats can clear the same area in 1.5 hours.

To sponsor your own HeroRAT® and for more information, visit www.apopo.org.



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